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Principal Self-Efficacy and its Relationship to District Climate

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Dedication

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Abstract

The research demonstrating the role of the principal in influencing student achievement has grown substantially over the last decade. However, increased systems of accountability for meeting school improvement goals have impacted the principalship, leading to increased turnover rates in underperforming schools. Principals, in turn, have had to acquire new skill sets to address the increasingly complexities of the role.

Effective school leadership is an integral component of school change initiatives; however, the research on the antecedents to what leads to effective school leadership is worthy of more attention in educational research. Principal self-efficacy (PSE) and collective efficacy has surfaced in educational literature as a formidable construct in explaining principal effectiveness. Coincidentally, there is an increasing body of literature on the role of the principal in supporting teachers' sense of efficacy. As the research on collective teacher efficacy in raising student performance offers insight and implications for practice, the research on how to cultivate principals' sense of efficacy to lead school improvement is warranted.

The purpose of this study was to explore the relationships between district climate and their sense of leadership efficacy to lead successful schools. District climate describes the collective effort within the organization of a school district to meet the goals of the organization. The dimensions of district climate include integrated superintendent leadership, enabling school structures, and teamwork for student success. Principal self-efficacy refers to principals' perception of their perceived ability to meet the established goals of the schools in which they lead from a managerial, instructional, and moral position.

To examine the relationship between district climate and principal self-efficacy, 42 principals in Essex County, New Jersey completed a three-part survey inclusive of principal

demographics, principal self-efficacy scale (PSES), and a district climate index scale (DCI) in the spring of 2020. The findings from the linear regression suggest a statistically significant correlation between district climate and principal self-efficacy. The teamwork for student success dimension of district climate presented to be highly correlated with principal self-efficacy. Enabling school structures proved to be the second greatest indicator for principal efficacy levels with integrated superintendent leadership having a less significant correlation to principal efficacy. The study offers practical guidance to school districts for recognizing and implementing changes to address how school districts operationalize themselves and central office staff in support of principal leadership efficacy that facilitate positive student outcomes. Limitations and delimitations of the study as well as suggestions for future research are discussed.

Keywords: principal self-efficacy, district climate, enabling district structure, leader efficacy, school improvement, integrated superintendent leadership, teamwork for student success

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Introduction

Background

The efficacy of public school education and its efforts at raising student achievement have long been a question of contention. Over the last twenty years, educational policy makers have set agendas and initiated policies aimed at improving the quality of instruction for students in traditional public school settings. In 2000, the Albert Shanker Institute published a report summoning public schools to demonstrate improvements to instructional delivery and how school leadership was defined and applied (Elmore, 2000). Alvoid and Black (2012) stated "With the changing landscape of education and the pressure it's putting on the principalship, districts must make it a priority to invest the requisite time, money, and effort into developing the capacity of current and future leadership ranks" (p. 8). The urgency of improving student performance has spawned countless educational studies, including administrative and organizational reviews of school leadership practices that are believed to affect student performance.

No Child Left Behind (NCLB, 2002), reauthorized in 2015 as *Every Student Succeeds Act* (*ESSA*), shifted the educational landscape towards increased systems of accountability with an introspection of instructional practices, standards-based reform, and high-stakes testing. The well-intended efforts of *ESSA* have been of little impact when considering the current state of student proficiency levels and its realization of the longstanding commitment to the provision of equal opportunity for all students. This is especially true for the least disadvantaged students, hailing from low-performing school districts where deeply rooted inequitable educational opportunities exist. The educational inequities that permeate low-performing school districts is

highlighted in a 2019 National Assessment of Educational Progress (NAEP) report showing U.S. fourth and eighth graders performance levels in reading and math have made minimal improvement over the last ten years. In fact, students performing well below proficiency levels have not made notable progress compared to 30 years ago (Barshay, 2019). The Program for International Assessment (PISA; 2012) emphatically claimed that the United States has "one of the most deeply inequitable systems of education."

According to the National Center for Children in Poverty (2017), approximately 43% of American children are raised in low-income households. Research has demonstrated the impact socioeconomic status has on a child's educational opportunities (McLaughlin & Sheridan, 2016; Aikens & Barbarin, 2008; Buckingham & Beaman-Wheldall, 2013; White, et al., 2016; Skin, 2005). Skin (2005) conducted a meta-analysis in which he reviewed the literature on socioeconomic status (SEL) and academic achievement based on published research between 1990 and 2000. The 100,000 plus student sample and 6,871 schools included in the review found a medium to strong relationship between socioeconomic status and student achievement. The relationship between SES and student achievement has profound implications for school principals in low-performing schools, as they are under greater scrutiny to raise student achievement more so than their higher-performing counterparts. In response, school accountability under *ESSA* increased regulations on school districts relative to per-pupil spending, forcing equity-enhancing approaches to reduce the opportunity gap (Cook-Harvey, et al., 2016). Increased systems of accountability on schools to demonstrate adequate yearly progress (AYP) have been associated with growing rates of principal turnover (Levin & Bradley, 2016; Alvoid & Black, Jr., 2014). Federal accountability and the expectations for school districts meeting them, compounded by students' socioeconomic status, may leave principals questioning

their ability to meet these expectations. Principal efficacy becomes increasingly important if principals are going to remain steadfast in meeting accountability sanctions. The role of the school district in supporting principals is further highlighted as district structures must support principals' capacity to lead successful schools.

The Impact of School Leadership

Strong school leadership has been identified as critical to school effectiveness because of the pivotal role principals serve in impacting student-learning outcomes through their work with teachers and in their oversight of school improvement through organizational policies (Hallinger & Heck, 1998; Marzano, Waters, & McNulty, 2005; Hitt & Tucker, 2016; Robinson, Lloyd, and Rowe, 2008). The definition of school leadership has evolved over time, shifting from one of being a building manager to an understanding of leadership as the process of influencing change, setting structures that promote goal attainment, the process for affecting policies, values and vision (Richmond and Allison, 2003; Krueger, 2012; Datnow, 2005; Hargreaves & Fink, 2006). The research states that principals have an indirect, but critical role in their influence on student achievement in the work they do to create and sustain positive and strong learning environments, build teacher capacity to deliver quality instruction, and in how they implement effective organizational processes (Leithwood et al., 2004; Seashore-Louis et al., 2010). This is of particular importance in schools where student learning needs are in dire need of attention. However, one quarter of the country's principals depart from the role each year, adversely affecting millions of students, primarily those of lower socio-economic status (School Leadership Network, 2014). Increased principal turnover rates present a grave challenge in the effort to make any improvements to school reform evidenced through increased student achievement.

Strong school leadership serves to set the tone and success of schools in which they lead (Davis, Darling-Hammond, LaPointe & Meyerson, 2005; Nichols, 2011; Leithwood, Seashore-Louis, Anderson & Wahlstrom, 2004; Waters, Marzano, & McNulty, 2003). Quantitative research dating back to the late 1990s reported that principals' indirect influence on student achievement is evidenced in their work with teachers, building supportive school cultures, and the conditions for teachers to deliver evidenced-based instruction (Hallinger & Heck, 1998; Marzano, Waters, & McNulty, 2005). Schools demonstrating the highest achievement gains in student learning have been attributed to school leaders who cultivate relationships with teachers and among teachers (Allensworth and Hart, 2018). School structures that promote teacher collaboration where discussion is based on student performance data and instructional practices to target student deficiencies creates school conditions that foster success for both teachers and students (Allensworth and Hart, 2018). Teachers thrive in such collaborative school cultures as they refine their pedagogy and develop into teacher leaders (Wahlstrom, Louis, Leithwood, & Anderson, 2010, p. 10). Students benefit as a result of teachers delivering quality instruction aligned to standards and targeted to meet their specific learning needs (Wahlstrom, Louis, Leithwood, & Anderson, 2010, p. 10).

A 2011 report by the Wallace Foundation touts an "empirical link between school leadership and improved student achievement" (Wallace Foundation, 2011, p. 3). With the understanding of the role of principals in impacting student performance and meeting federal accountability, it is incumbent upon school districts, as well as teacher preparation programs, to cultivate school leaders for the complexities of the role (Hallinger & Heck, 2017).

Leithwood et al. (2008) report that principals indirectly affect instructional practice through their "influence on staff motivation, commitment, and working conditions" (p. 27).

Educational researchers agree that the most effective means by which principals influence school improvement is by clearly setting and managing a school's vision and goals (Hallinger, 2005; Hallinger & Heck, 1996; Wahlstrom, 2012). Qualitative research adds to the indispensable contribution of principals in turning around low-performing schools (Leithwood et al., 2004) and in sustaining organizational improvement (Datnow, 2005). However, the evolving role of school leaders has become increasingly complex as principals face amplified expectations to manage daily school operations, fiscal accountability, oversee instruction, act as data miners, development of teachers, apply teacher evaluation systems, foster community relations, and a plethora of academic, behavioral, social, and emotional needs of students (Alvoid & Black, Jr., 2014).

The changing landscape of the principalship, combined with the variance in how principals are trained, has conveyed a message that the principalship is not a sustainable or desirable role (Alvoid & Black, Jr., 2014). The 2012 published by the Center for American Progress reported that 20% of new principals left the position within two years of being assigned. According to the 2012 Report, the rate was higher in lower-performing schools. A 2013 report by The Metlife Survey of the American Teacher: Challenges for School Leadership Teachers reported that 75% of principals stated that the role of the principal had become "more complex, challenging, and stressful." The Center for American Progress cites the challenges placed on principals as a result of increased accountability in the form of teacher development to address the delivery of instruction. The report speaks of the time management and expertise required of principals to complete these tasks, often time removing them from serving as instructional leaders. Through a series of case studies, the 2012 report presents the ways in which school districts have revamped their practices in an effort to better support principals, evidenced by

"training and supporting school leaders so that they are able to meet the ever-increasing demands placed upon them, such as a strategic focus on coaching and instructional feedback, customized professional development, streamlining the principal's job duties, and partnerships with universities and nonprofits to train the next generation of principals (p. 2)."

Statement of the Problem

Effective principal leadership must be present to meet the challenges and expectations placed on schools to succeed (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Myriad challenges exist in the lowest performing school districts that require effective school leadership. Low student performance, teachers without strong content knowledge, the socioemotional needs of learners, increased English Language Learners, digital inequities—all present challenges for schools in high poverty districts. Principals leading in these environments must be equipped with the resources and conditions to effectuate school turnaround efforts imposed by federal sanctions. As such, principals prefer to remain in their current setting and not accept vacancies in low-performing schools (Usdan, McCloud, & Podmostko, 2000). School districts and how they operationalize themselves to support principals' ability to lead a school in crisis and in jeopardy of state oversight under ESSA is critical to student success.

Research demonstrating the importance of principals for student learning has grown substantially over the last decade. The Bush Institute presented data stating that 25% of a school's total impact on student achievement is attributed to the principal (Louis et al., 2010). Dhuey and Smith (2014) reported on data used from British Columbia and found that a one standard deviation improvement in principal quality can boost student performance, which equates to approximately an 11 percentile increase in reading achievement and a 16 percentile increase in math achievement. Correspondingly, Chiang et al. (2012, 2016) reported on data

from elementary and middle school students in Pennsylvania and found that principals explain approximately 15% of the overall school effect for every one point increase in standard deviation for principal effectiveness (Xu, 2018).

Researchers have also documented the actions and practices that differentiate highly effective principals; specifically, how they develop talented teachers, create school cultures, and working conditions that retain distinguished teachers. The ambitious education reform initiatives the United States has undertaken over the decade heighten the imperative for leaders who can successfully lead this work. This statement is highlighted by the Bush Institute (2014) noting "Simply put, to turn around low-performing schools, ensure effective teaching in every classroom, and educate all children [to meet] college and career-ready standards, policy makers and school district leaders need to ensure that there is an effective principal in every school" (p. 4).

Quantitative research conducted in the past ten years remains true of the role principals play in positively impacting school outcomes (Burkhauser, Gates, Hamilton, & Ikemoto, 2012.) Leithwood and Louis (2012) conducted an extensive literature review and five-year study of school leadership, its antecedents and effects. The research found that school leaders influence school improvement via student performance mostly through their influence on teachers and school culture. Sebastian and Allensworth (2012) confirmed the role of principal leadership on school outcomes, noting that the "learning climate" (pp. 15–16) is the primary factor. As school culture and climate is aligned with teacher motivation and student performance, the same holds true for principals. Principals' effectiveness, however, is contingent upon district organizations that offer social networks, support collaboration and innovation, and cultivate a culture of transparency (Forsyth, Adams, Hoy, 2011; Barth, 1990, 2002; Togneri & Anderson, 2003;

Bottoms and Fry, 2009; Bottoms and Schmidt, 2009).

The climate in which principals lead can have positive and/or negative implications for the likelihood of their success (SREB, 2009). Bandura (2000) posited that "When faced with obstacles, setbacks, and failures, those who doubt their capabilities slacken their efforts, give up, or settle for mediocre solutions. Those who have strong beliefs in their capabilities redouble their effort to master the challenge" (p. 120). The decisions principals make on a daily basis are based on what they think about their ability to produce change within the climate in which they lead. Conditions that support efficacious principals are those where collaborative structures are in place, coupled with common goals and a clear vision for change among district administrators, principals, and teachers and where a distributive model of leadership is evidenced (Louis et al., 2010). Principals leading with increased oversight and accountability experience a number of challenges and pressure to meet expectations for improved performance more so than their counterparts, wholly because of the complex context in which they work.

Research from Bandura dating back to 1993 provides evidence that leaders with strong efficacy are able to persist in challenging situations, while those with low self-efficacy often give up or choose to revise ineffective practices. This is principal agency, the ability to act and make decisions that solve problems, critical to successful leadership. As such, "Leadership efficacy is likely the key variable in regulating leader functioning in dynamic environments" (McCormick, 2001) and worthy of exploration. Principal self-efficacy is directly related to the action leaders take to direct school improvement (Tschannen-Moran & Gareis, 2005). The research on principal efficacy as related to district climate, however, remains scarce.

The most influential approach to which school districts can influence teaching and learning is through the "contribution they make to the feelings of professional efficacy on the

part of the school principal" (CAREI, 2010). Principal self-efficacy provides a promising construct for growing efficacious school leaders who produce change. However, the research on principal self-efficacy is deficient in its exploration of leadership in context (Hallinger, 2018). This research serves to add to the body of literature on the relationship between principal self-efficacy and district climate with a focus on public school principals in Essex County, New Jersey.

Conceptual Framework

Theoretical frameworks offer explanations and generalizations about how the world functions (Creswell, 1998). Albert Bandura's self-efficacy and Social Cognitive Theory served as the theoretical underpinning for this study. Bandura (1997) defined self-efficacy as one's belief in their perceived ability to lead despite being confronted with challenges. Hallinger's Bringing the Context out of the Shadows of Leadership 2018 article argued the need for further exploration of school context that influence leadership practice. Bandura (2000) reported that principals with high self-efficacy persist when challenged and those with low self-efficacy tend to relinquish their authority to others to assist with solving a complex problem. It is incumbent upon policy leaders, district leaders, principal preparation programs, and potential school leaders to understand the antecedents to principal self-efficacy if progress toward school improvement is to be made. The purpose of this study was to examine the relationship between principal self-efficacy and district climate.

A Wallace Foundation educational briefing to U.S. senators offered research purporting the necessity for school districts and school leaders to work collaboratively to link educational reform initiatives that understand the true role of the principal. The briefing centered on how ESSA could be used to strengthen school leadership. This aligns with previous research from

Stover (2005) who recognized the role of the principal as being central to improving school outcomes. McFarlane (2010) added to the discussion on school leadership, stating that superintendent leadership and district climate is central to school improvement, as leadership practices at the district level affect the behaviors of principals, teachers, staff, and students.

However, it can be speculated that increased systems of accountability under ESSA have placed unreasonable and often unattainable performance goals and managerial expectations on principals. Ikemoto et al. (2014) refer to the role of the principalship as being superhero-like. The report makes reference to the "superhero principal narrative which they tout has encouraged some districts and policymakers to pin their hopes on such leaders, churning through principals while wondering why they cannot find enough people capable of delivering superhuman results in untenable contexts. Given the superhero jobs these leaders have to do, they often burn out quickly and leave the very schools and districts that need their long-term commitment and sustained work" (Ikemoto et al., 2014, p. 4).

With the understanding of the importance of school districts and principals working together to meet accountability rubrics, the need for effective leadership at all levels becomes clear. In 2015, 48 states adopted or modified voluntary national leader standards; 14 states, including New Jersey, adopted the 2015 National Professional Standards for Educational Leaders (PSEL); 50 states have included leadership development in their ESSA plans; and 37 states introduced or passed legislation related to school leadership in 2017 as reported by state education commissions. As reported by the Council of Chief State School Officers, the former ISLLC standards were revised with the goal of ensuring district and all levels of educational leadership had a framework to lead student achievement given new and higher expectations for student performance.

The PSEL differ from the former ISLLC standards in that there is an explicit emphasis on students and student achievement and preparing them with 21st century skills. Interestingly, and a key connection to this study, is in the description of what principals must do to improve student achievement relative to the school district. NJPSEL states, "They [educational leaders] must approach … every interaction with the central office … with one question always in mind: How will this help our students excel as learners?" This explanation further serves to highlight the importance and connection between the school district and how principals lead. The National Policy Board for Educational Administration (2015) states the purpose of the standards in the introduction noting the following:

> "The Standards reflect a positive approach to leadership that is optimistic, emphasizes development and strengths, and focuses on human potential … They are grounded in the present, they are aspirational, recognizing that the changing world in which educational leaders work today will continue to transform—and the demands and expectations for educational leaders along with it … They challenge the profession, professional associations, policy makers, institutions of higher education, and other organizations that support educational leaders and their development to move beyond established practices and systems … The 2015 Standards reflect the importance of cultivating leadership capacity of others."

The purpose of the standards as presented above further serve to draw attention to the role of the school district in supporting principals. The three dimensions of district climate are present in the descriptions above as the need to build human capacity is related to self-efficacy, and how the district's central office supports innovation and collaboration among all levels of leadership. The adoption of new standards communicates the urgency for a leadership

framework that supports school leaders in the State of New Jersey to lead given the "myriad challenges for educational leaders" (National Policy Board for Educational Administration, 2015, p. 7).

The conceptual framework of this study is based on Bandura's (2000) self-efficacy theory, which positions that leaders with low self-efficacy do not persist during challenging times and those with strong efficacy or belief in their capabilities redouble their efforts to "master the challenge" (p. 120). From this framework the claim can be made that principal self-efficacy is important to our understanding of what contributes to effective school leadership. This claim can be extended to how school districts can support principals' leadership efficacy, which in turn influences their capacity to lead school reform (Paglis & Green, 2002). However, principal self-efficacy and its influence on school improvement must be explored from a contextual framework, as self-efficacy is mediated by one's environment, personal factors, and behavior.

The effectiveness of principals in their ability to implement programs and curriculum that serve to influence student performance is based upon many factors, motivation, and their perceived ability to effectuate change and call others to action. The leadership style principals take to direct a course of action within their schools is also contingent upon their levels of self-efficacy. Research conducted by Cobanoglu and Yurek (2018) stated that in order for school leaders to implement change and direct others, understanding principals' levels of self-efficacy is equally important in determining the leadership styles displayed by principals. Cobanogly and Yurek (2018) found that principals' self-efficacy have a correlation to the leadership style undertaken by principals. Further they reported that leaders who claim to be transformational in their approach to school leadership have greater feelings of self-efficacy than those who report

lower levels of self-efficacy.

Self-efficacy is a term that has been used since the early 1980s with Albert Bandura's Social Cognitive Theory. The term self-efficacy has been applied to organizational psychology in an attempt to predict the attitudes and behaviors relative to a person's perceptions about their ability to perform a specific function (Cherniss, 1993, as cited in Fisher, 2020, p. 2).

Self-efficacy is in alignment with self-confidence and as such is worthy of study on the district conditions that can serve to foster it. To date there has been very little research that examines antecedents to principal self-efficacy, more specifically, district influences that support or hinder it. Exploring this issue may help inform school districts, principal preparation programs, and policy makers to understand the district contextual influences on principal self-efficacy.

Tschannen-Moran & Hoy (2007) reported that principals with high self-efficacy have been linked to successful schools. Tschannen-Moran and Gareis (2004) stated that without effective school leadership, initiatives aimed at raising student achievement will be met with little success. Current and past school reform efforts place increasingly complex demands on school leaders to raise student performance across all subgroups. The role of the principal leading in a climate of heightened state and federal accountability have overburdened roles, less autonomy, work at less than competitive salaries, and repeatedly experience poor student outcomes (NASSP, 2019). Principal self-efficacy may serve to explain how school leaders persevere, and explain the district level influences that enable them to rise above the challenges and remain steadfast to school turnaround efforts. There is limited research addressing the way in which school districts support principal efficacy—a viable construct to creating efficacious school leaders.

Purpose of the Study

The purpose of this study was to examine which dimension of district climate—enabling structures, integrated superintendent leadership, or teamwork for student success—has the strongest association with the three dimensions of principals' total self-efficacy:

- Principal self-efficacy for management;
- Principal self-efficacy for instructional leadership; and
- Principal self-efficacy for moral leadership.

Adopting Bandura's Self-Efficacy as the theoretical framework, this study builds upon the construct of self-efficacy as an indicator of principal effectiveness. Self-efficacy refers to a person's belief in their ability to enact a course of action to achieve a desired result (Bandura, 1977, 1986, 1997). Those with high levels of self-efficacy persist when faced with a challenge while those with lower levels of self-efficacy question their ability and abandon the task or rely on others to direct a course of action. Those with higher levels of self-efficacy expend the effort in meeting a goal as they perceive themselves as having some level of control over their environment or the context in which they are in. Self-efficacy is formed from four sources: mastery experiences, vicarious experiences, social persuasion, and physiological or emotional states (Bandura, 1997). Tschannen-Moran and Gareis (2008) applied Bandura's Theory of Self Efficacy to school principals aligning it to three dimensions—principal self-efficacy for instruction, management, and moral leadership—each influenced to some degree by Bandura's three sources: mastery experiences, vicarious experiences, social persuasion and emotional states.

PSE for Managerial Leadership speaks to the principal's capacity to handle the administrative tasks associated with the job. PSE for Instructional Leadership addresses the

principals' belief in their ability to direct the academic program of the school leading to improved student and teacher performance. PSE for Moral Leadership speaks to a principal's perceived ability to set the vision and mission of the school leading to a culture that supports a collaborative and nurturing learning environment.

Bandura (1997) states that efficacy beliefs develop as a result of cognitive and affective mechanisms. Cognitive mechanisms are the perceptions of leaders' ability to influence change and persist when faced with obstacles. Affective mechanisms consider self-motivation and the effort expended to meet the goal. McCormick affirms that "Every major review of the leadership literature lists self-confidence as an essential characteristic for effective leadership" (2001, p. 23).

Significance of the Study

Student achievement and improvements to school climate can be linked to principal effectiveness (Branch, et al., 2013; Elberts & Stone, 1988, Gurr et al., 2005; Norton, 2002). Given the impact principals have on student outcomes, it is essential that school districts know how to support them. Self-efficacy provides the construct for understanding the beliefs that enable principals to act in ways that support successful schools despite the challenges of their context.

Few studies have addressed the way in which school districts support or hinder principal efficacy—a viable construct to creating efficacious school leaders. This study adds to the paucity in the available research and sheds light on the role the school district plays in cultivating district climates that support principal self-efficacy, resulting in improved student performance and school effectiveness.

This study adds to the limited body of research on the relationship between the school

districts and its role in supporting principals' perception of their ability to lead successfully. It serves to offer school districts, policymakers, and principal preparation programs with insight on how principals arrive at the belief that they have the ability to raise student achievement amidst increased federal accountability, students' socioeconomic status, and current achievement levels. This study offers insight on how to best cultivate school leaders who are confident in their ability to lead as they implement intentional practices and create supportive structures, increasing principal autonomy. Such practices serve to produce efficacious school level leaders who can address the evolving complexity of the role of the principalship. The New Leaders and Bush Institute (2014) reported "Effective school districts help principals implement the new and demanding responsibilities with holistic performance management systems that systematically develop, support, motivate, and retain quality leadership talent (p. 22).

Research Questions

Principal efficacy has been found to have a positive relationship with the implementation of district initiatives, school conditions, and student learning (Wallace Foundation, 2010). The purpose of the study was to explore the relationship between principal self-efficacy and district climate, and to identify which dimension of district climate has the strongest association with principal self-efficacy. The following research questions were used to guide this quantitative correlational study:

1. To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the managerial aspects of leadership (Managerial PSE)?
2. To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the instructional aspects of leadership (Instructional PSE)?
3. To what extent do the dimensions of district climate correlate to principals' sense of

efficacy with regard to the moral aspects of leadership (Moral PSE)?

4. Which dimension of district climate has the strongest association with the three dimensions of principal's total self-efficacy (management, instructional leadership, and moral leadership) (Total PSE) when controlling for demographics?

Research Design and Methodology

This quantitative, descriptive, correlational study used data obtained from three surveys: Tschannen-Moran's Principal Sense of Efficacy Scale (PSES, 2004), the District Climate Index (DiPaola & Smith, 2008), and a demographic survey. The survey was emailed to principals using addresses obtained through the New Jersey Department of Education (NJDOE) https://homeroom5.doe.state.nj.us/directory. The PSES provided empirical data on the self-efficacy of participants in the study. The DCI captured principals' perception of the three subcomponents of district climate: integrated superintendent leadership, enabling district structures, and teamwork for student success (DiPaola & Smith, 2008).

Independent Variables

District context was the independent variable to be used to explore its relationship to principal self-efficacy. The District Climate Index (DCI) is a 30-item accepted instrument used to "measure the impact of central office and policy personnel on the success of individual schools under their province" (DiPaola & Smith, 2008). As the principal is held accountable for implementing reform efforts and district initiatives, the DCI provided information on district characteristics, including district leadership and district conditions, that have been linked to principals' efficacy to lead successful schools. The DCI yields a total score for the three elements of district climate: integrated superintendent leadership, enabling district structures, and teamwork for student success (DiPaola & Smith, 2008).

Dependent Variable

Principal Self-Efficacy was the dependent variable explored in this study. The Principal Self-Efficacy Scale (PSES), an 18-item survey, was used to capture the efficacy of principals on the three dimensions of self-efficacy: instructional, managerial and moral leadership.

Definition of Terms

Context. The interrelated conditions in which something exists or occurs.

District climate. The collective efforts by all individuals within the organization that foster actions to help the organization efficiently reach its goal (DiPaoloa & Smith, 2008).

Leadership. Louis et al. (2010) offered a definition of "leadership" that is distilled from the essence of their findings: "Leadership is all about organizational improvement; more specifically, it is about establishing agreed-upon and worthwhile directions for the organization in question, and doing whatever it takes to prod and support people to move in those directions" (pp. 9–10).

Effective leadership. This is leadership of a school that has undergone planned change leading to improved academic achievement of the students in the school, as well as the development of the abilities of the staff.

Instructional leadership. Hallinger (2005) describes instructional leadership as directly relating to three domains of influence: "defining the school's mission, managing the instructional program, and promoting a positive school learning climate" (p. 225).

Principal. The principal is the lead teacher in a school, the individual who bears the responsibility for the management and instructional leadership of the school.

Self-efficacy. One's belief about his or her ability to produce change.

Social Cognitive Theory. Proposed by Albert Bandura (1997) to explain that human

behavior is the result of interplay of three influences: behavior, personal factors, and the environment each which serves to guide the decision-making process followed by action.

School leadership. This is "second only to classroom teaching as an influence on pupil learning" (Leithwood, Harris, & Hopkins, 2008, p. 28). School leadership consists of the direct and indirect effects of school principals that have a positive influence on school outcomes (Hallinger and Heck, 1998).

Leadership efficacy. A person's perceived confidence in their ability to make decision and motivate others to meet the goals of an organization.

District Climate. As defined by DiPaola & Smith (2008), "the collective effort by all individuals within organizations that foster actions to help the organization efficiently reach its goals" (p. 118). The dimensions of district climate include integrated superintendent leadership, enabling structures, and teamwork for student success.

Principal self-efficacy. A principal's perceived belief in his/her capacity to accomplish a contextually specific task.

Enabling school structures. School organizational structures and practices that are supportive, foster trust and collaborative partnerships.

Integrated superintendent leadership. The superintendent is recognized as the primary charged with initiating change. Integrated superintendent leadership identifies the behaviors and actions that serve to foster trust and collaboration. Marzano and Waters (2009) described the implications of effective leadership from the district level by establishing a relationship between district leadership and student achievement.

Teamwork for student success. This refers to observable instructional rigor teaching and learning, and collective efficacy evidenced in collegial relationships and a "commitment the

success of all students" (DiPaola and Smith, 2008, p. 14).

Coercive school systems. These systems are "characterized by one-way communication (top-down), viewing problems as constraints, mistrusting, forcing consensus, suspecting differences, punishing mistakes, and fearing the unexpected" (Hoy and Sweetland, 2000, p. 527).

Delimitations

The combined 54-item survey was emailed to principals in elementary and secondary public schools in the Essex County, New Jersey. While the State of New Jersey's school system from preschool through high school ranked number one as the best public school system in the United States, it is not without its challenges (*US News*, retrieved from https://www.usnews.com/news/best-states/rankings/education). Of the 202 total schools in Essex County, 32 of them have been identified by the NJDOE as schools in need of improvement. This represents 15% of schools captured under ESSA's state accountability, followed by Passaic with 14% of schools captured under ESSA and 140 schools in the county. Statewide, 10% of schools captured under ESSA are either targeted or comprehensive. The NJ ESSA State Plan denotes the lowest performing five percent of schools as in need of improvement and subject to additional interventions and oversight. Essex County, New Jersey schools are well above the five percent threshold, making it a suitable district to explore as it has the highest number of schools in need of improvement compared to other counties in the State of New Jersey. Interestingly, the more affluent counties such as Morris and Bergen school districts presented with 1.3 and 3.7% of schools captured under ESSA. This data further supports the claim that strong school leadership is critical in urban school districts where student performance is significantly lower than its suburban counterparts.

The study was designed to uncover the relationship between principal self-efficacy and

district climate from the principal's perspective. Exclusion of district-level administrators or teachers within the respondents' schools may have supported an understanding of district context on the overall school system, yet that undertaking was outside the scope of this study.

Limitations

The study sought to identify the relationship between principal efficacy and district climate using quantitative, correlation, and descriptive statistics. It was not intended to identify a causal relationship between the two. The study was limited to principals of public schools (non-charter or private) in Essex County registered in the New Jersey Department of Education's administrator database at the time the survey was launched. In employing survey distribution via email, all possible participants may not have received the survey because of incorrect email addresses or district internet filters that may have blocked external email sources impacting generalization of data. School districts in Essex County, New Jersey were selected based on 32 of the 202 schools in Essex County under ESSA oversight as either comprehensive, targeted, or both (NJDOE, 2021).

This study reported on a combined analysis of district climate on principal efficacy from principals of elementary and secondary school levels. This method did not provide results on the relationship of district climate and principal self-efficacy for specific school levels; further research including school level may be worthy of exploration. Another limitation of the data collection process was that it collected at one moment in time. As self-efficacy is contextual; participants' responses may change based upon what is occurring in their district. A longitudinal data collection process would serve to examine principal perspectives over a period of time. Further, additional factors outside the scope of this study may serve as a contributing factor to principal self-efficacy, such as participation in a principal preparation program. A limitation of

the study was that the demographic variables were not considered in the correlational analyses. Also, the study did not look at PSE and school levels of principals. It would be worthwhile for a study to be done that includes a look at a school level as a factor when considering how districts foster high PSE at different school levels.

Organization of the Study

This chapter presented an overview of the study, including an introduction to the topic, statement of the problem, purpose and significance of the study, research questions, limitations and delimitations of the study, and definitions associated with the study.

Chapter II includes a review of the literature used to inform the proposed study. Chapter III informs the research design and methodology, including a description of the participants, sampling, instruments and data collection, and analysis. Chapter IV presents the research findings. Chapter V reports the conclusions, recommendations, and implications drawn from the study.

Chapter II

Review of the Literature

Chapter II reviews the existing literature relative to principal self-efficacy and district climate. This chapter begins with a discussion on the impact of educational reform efforts on the principalship. It continues with a discussion on the conceptual framework for this study, Social Cognitive Theory of Self-Efficacy, and the sources of self-efficacy. This chapter provides an explanation of principal self-efficacy and the Principal Self-Efficacy Scale (PSES), the instrument used to measure principal self-efficacy. Chapter II continues with a discussion on the principalship in context. Next, the review of literature discusses district climate and the District Climate Index (DCI), the instrument used to measure it, with an explanation of the three dimensions of district.

The Principalship: School Improvement and Educational Reform

The purpose of this study was to examine the relationship between principal self-efficacy and district climate. The research confirms the influence of principal self-efficacy in addressing school reform efforts as directed by federal, state, and local accountability measures aimed at improving school and student outcomes (Wallace Foundation, 2010).

A 2014 brief from the Center for American Progress expressed that the job of today's principal would be "unrecognizable to the principals of the 1960s, 1970s, and 1980s" (*Changing Role of the Principal – Center for American Progress,* 2014, p. 1). Low-performing school districts are under increased scrutiny to demonstrate improved student learning outcomes and school effectiveness. The principalship has evolved from one of building managers to one with a complex set of responsibilities. Recent studies in educational leadership state that the principalship "is a position that is reportedly more difficult, time-consuming, and pivotal today

than ever before" (Kafka, 2009, p. 318). The skills required of the principal have evolved to include building manager, curriculum developer, district representative, community advocate, and social service provider (Goodwin et al., 2005). Goodwin et al. (2005) refer to the change in the role of the principal as an "accumulation of responsibilities rather than an evolution" (pp. 1–2). This accumulation of responsibilities is rooted in the political environment surrounding the field of education (Kafka, 2009, p. 319). This is particularly true for principals in low-performing school districts because of federal oversight for increased student achievement. School districts under federal oversight under ESSA experience greater accountability as evidenced in quarterly reporting on student and school performance based on targeted goals. Comprehensive or targeted schools under ESSA may be subject to required professional development of the principal and faculty to improve instructional practices with the aim of raising student achievement. Schools in higher-performing districts are not subject to such scrutiny and reporting, thus lessening the accumulation of responsibilities for principals of those schools.

As the politics of education change, so does the role of the principal. The current educational reform landscape raises the pressure on school districts to demonstrate increased levels of student proficiency across all subgroups. In turn, school districts transfer these demands on the school principal. The push for improved student performance strips principals of their autonomy in their efforts to meet "government defined priorities" (Leithwood, 2007, pp. 11–12).

The academic state of U.S. students is not much better today than it was three decades ago with the release of A Nation at Risk (1983) and the federal mandates that followed. In 2014, over 200 schools in New Jersey were identified as in need of improvement and federal oversight,

as they were the lowest performing schools in the state. From 2000 to 2017 NAEP, scores showed that fourth-grade math results increased by 14 points, with eighth-grade math increasing by ten points during the same period. Proficiency levels began flatlining in 2009–2010 with curriculum changes and standards-based reform initiatives under the Common Core (AIR, 2015). Increased federal oversight contributed to gains in student math performance occurring between 2000 to 2010. Research suggests that student improvement was observed immediately after the transition to the Common Core. This is perhaps due to the novelty of accountability and the pressure placed on principals and teachers to do well, an increased emphasis on teacher collaboration, and a shared belief of success for all students. However, the data shows that reading scores only slightly increased and leveled off in 2010 and forward. The average mathematics score for fourth-grade students in 2017 was not significantly different compared to 2015, the previous assessment year. Academic trends show math and reading scores for grades four and eight have increased over the last two decades, although the largest increases occurred in the early years of NCLB, with the exception of eighth-grade reading. While increased accountability may have contributed to the narrowing of math and reading gaps between racial groups, students qualifying for free and reduced lunch status data remained unchanged. These data points are key in understanding the role of the principal in impacting student achievement, either directly or indirectly. It is key to remember, however, that pressure placed on principals to meet federal accountability adds to increased turnover rates, continued rates of underperforming schools, and poor student outcomes.

Louis et al. (2012) reported that they have "yet to find a single documented case of school improvement in the absence of an effective leader" (p. 10). However, the research on improving student learning outcomes focused on the need for increased teacher accountability

and professional development, rather than the support needed to support principals leading in complex learning environments. Today's principals have had to acquire a new set of competencies, void of a singular focus as the building manager. Johnson (2006) reported on the changing role of the principal as "the broker of workplace conditions …whose influence on the school extends well beyond being in charge of the school" (p. 15). Given the research of the impact principals have on teaching and learning and their importance to state and national policy, district leaders, principal preparation programs, and policy makers must ensure that principals are effectively able to meet the ever-increasing demands of their jobs. Bandura's Social Cognitive Theory of Self-Efficacy may serve to assist them in understanding how to cultivate effective school leaders with the capacity to lead school reform efforts.

Social Cognitive Theory of Self-Efficacy

Albert Bandura's Social Cognitive Theory (1986) served as the theoretical framework guiding this study. Social Cognitive Theory (1986) emerged from Bandura's (1977a) social learning theory, which is the concept of personal efficacy as the "conviction that one can successfully execute the behavior required to produce [given] outcomes" (p. 79). It considers the influence of one's personal, behavioral, and environmental influences of a person's past experiences and the social contexts from which they were formed as a determinant for repeated behavior. Self-efficacy is a belief, not a judgment of one's actual ability. It is a context-specific and multifaceted dynamic "interplay of personal, behavioral, and environmental influences resulting in a triadic reciprocity" (as cited in Federici & Skaalvik, 2011, p. 577). In applying Bandura's Triadic Reciprocal Determinism, it can be hypothesized that one's leadership is influenced by personal factors, behavior, the environment, and the contextual intersection of these factors in which they lead (Bandura, 1986, 1997a) (Figure 1).

The theory of self-efficacy has been applied to a broad range of topics, most interestingly, leadership efficacy. Bandura's theory of efficacy speaks to levels of efficacy noting that behavior or outcome expectancy is related to how much or how little a person's efficacy beliefs are. Locke, Frederick, Lee, & Bobko (1984) expanded on Bandura's (1986) discussion on efficacy levels stating that the efficacy levels are attributed to goal setting, perseverance in meeting those goals, and the magnitude of the goal. Bandura (1997a) applied self-efficacy theory to school principals asserting that efficacy levels are reflective of a principal's ability to meet school level goals (Bandura, 1997; Tschannen-Moran & Gareis, 2004). A 2002 study by McCormick, Tanguma, and López-Forment reported the importance of high levels of leadership efficacy, and reported on the need to understand how leadership efficacy perceptions develop. They determined that leadership efficacy is a gradual process that develops as a result of one's experiences and how one interprets those experiences.

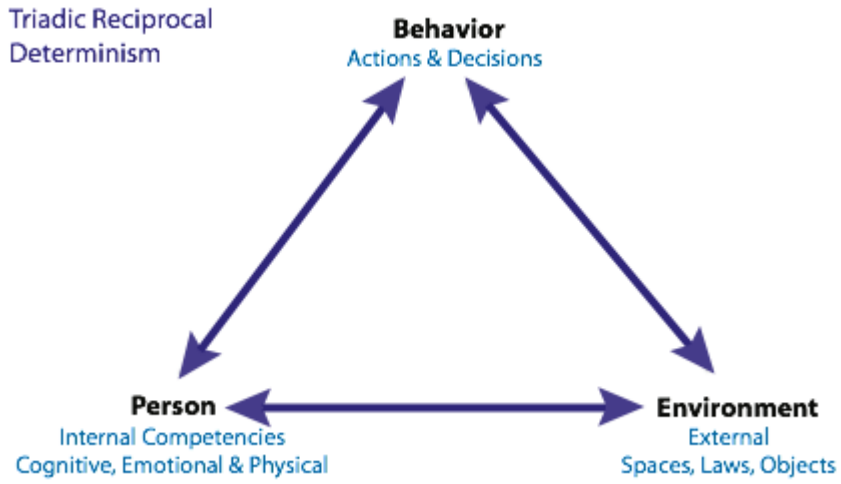

Figure 1. Triadic Reciprocal Determinism (Bandura, 1986, 1997a)

Sources of Self-Efficacy: Triadic Reciprocal Determinism

There are four major sources to self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal (Bandura 1977b).

Mastery experiences are the most impactful on self-efficacy, as one's belief about their ability to impact change increases with each successful experience (Bandura, 1986). Bandura claims that the magnitude or the difficulty of an event adds to the lasting effect on one's self-efficacy, as the person internalizes their belief to do well within the same context when confronted with that event again. Cumulative successes give rise to the person's belief about their capacity to yield desired results. Pajares (2002) confirmed this notion of mastery experiences as a positive influence on self-efficacy, stating the absence of achievement decreases efficacious beliefs. This is central to our understanding of how principals remain resilient in underperforming schools, crippling accountability systems, or other district contextual factors that hinder principal leadership capacity.

Vicarious experiences support efficacy building by viewing one's capabilities in relation to the performance of others. Social modeling, as Bandura (1997) coined it, stated that people make judgments about their own capabilities through their observation of others whom they perceive are similar. Bandura also states that one's self-efficacy can be formed through observation of those who are dissimilar. In other words, principals may exhibit efficacious behavior by observing those in positions higher than themselves such as the superintendent. Districts can further build principal self-efficacy in this area by providing them with regular experiences of observing others modeling success. This can include giving principals the opportunity to shadow or observe one another in practice. Districts with highly collaborative social structures, affording principals the opportunity to work collectively, may serve to increase

levels of self-efficacy as the principal begins to weigh or evaluate his or her unique contribution to the attainment of the organization's goals.

Verbal or social persuasion, the third source of self-efficacy, influences self-belief as a result of how one internalizes praise or criticism from others. Verbal persuasion has its limitations as persuasion lacking authenticity fails to create lasting increases in perceived efficacy. It is, however, impactful when married with direct or indirect vicarious experiences and the same message is received from multiple sources (Goddard, Hoy, & Hoy, 2004). Messages aimed at supporting self-efficacy are most effective when framed in terms of one's personal growth, rather than the success of someone else. School districts contribute to principals' self-efficacy through verbal or social persuasion with the provision of coaches and structures that support principals' individual growth and development.

The final source of self-efficacy as hypothesized by Bandura (1997) is physiological arousal or a person's affective response to an event—how well or poorly a person responds to stress, fear, or other emotional states. The emotional arousal triggered by the body's response to stress, fear, and changes in mood impact judgment and decision-making. Principals subject to contexts that elicit these emotions may not believe they are equipped to accomplish a task. Consequently, feelings of inadequacy and diminished efficacy often affects the leaders' ability or comfort directing change.

Self-efficacy is a key predictor of future actions. It is sourced from mastery experiences, vicarious experiences, verbal persuasion, and physiological response to external or internal factors. Self-efficacy guides how people perform and persist in challenging contexts. People who possess high self-efficacy demonstrate resiliency in the face of obstacles and center their efforts on exigent tasks with confidence (Bandura, 1982, p. 123).

The role of the school principal has always been multifaceted. Cuban (1988) identified the political, managerial, and instructional roles as fundamental to the principalship. Cuban posited that effective principals are those who are able to balance the tasks associated with the principalship given their school context. The role of the school leader is complex and requires one to be certain in their capability to make decisions and strike balance in addressing the different aspects of their role (Hallinger, 2005).

Bandura's self-efficacy provides the construct for ensuring leaders are outfitted with the skills and personal belief in their ability to lead effectively given the context of their school environment. Given the integrated roles of the principalship, that is, program manager in 1960s, an instructional leader in 1980s, resurfaced in early 2000 as a transformational leader in the 1990s (Vandenberghe, 1995), principals' perception of their ability to perform the duties of the role are paramount to effective school leadership (Hannah, Avolio, Luthans, and Harms 2008). With the increasing body of research on teacher self-efficacy and collective teacher efficacy, it is plausible that an emerging leadership style is leadership-efficacy and worthy of exploring how it is impacted by district climate.

The pre-determined goal or agenda for all schools and their school leaders is to improve student performance. With this, one might consider outcome expectancy theory as a plausible framework for considering the actions of principals and how school effectiveness is measured; however, it is important to look at how principals' approach school leadership and the challenges that stem from it. This statement can be supported by McCollum and Kajs (2015), who note that one's motivation is equally important to the skills and knowledge a school leader possesses, as by human nature, people often avoid tasks that they perceive to be difficult or that they may not be prepared to address.

Considering alternative approaches for this research, Giddens (1979, 1984) structuration theory was also explored. Structuration theory is a social learning theory used to explain the interplay between human social interactions or structures of meaning, norms, and power (Thompson, 2017). In considering how one comes to take on a course of action, such as a school principal implementing school improvement plans, Giddens states human agency (action) and structures are mutually exclusive and cannot be isolated from the other. This is aligned to Bandura's social cognitive theory of self-efficacy in that one's determinism serves as the catalyst for action and external and internal factors that influence agency. Giddens structuration theory provides further credit for use of Bandura's social cognitive theory as it recognizes the actions of the individual and the variables that affect human agency, such as environmental constraints found in coercive school systems. Giddens' structuration theory is "intended to demonstrate the complex interrelations of human freedom (or agency) and determination (or structure) where "individual choices are seen as partially constrained, but they remain choices nonetheless" (as cited in Bratton, Callinan, Forshaw, & Sawchuk, 2007, p. 373). The choices that principals make determine student and teachers outcomes—key to school effectiveness.

Bandura's social cognitive theory is appropriate to this study as it serves to address how levels of self-efficacy can be used to explain principal effectiveness. As school districts seek to make improvements to school outcomes, they want to secure principals who demonstrate high regard for their ability to lead school improvement initiatives.

The research on the importance of self-efficacy on school leadership is present (Ata, 2015; Acat, Ozyurt, and Karadag, 2011; Demirtas &Caglar, 2012; Koy Basi, 2017; Fisher, 2014; Tschannen-Moran & Gareis, 2007; Okutan & Kahveci, 2012; Osterman & Sullivan, 1996; Santamaría, 2008; Sazali, 2010; Smith, Guarino, Storm, &Adams 2006). The research speaks to

self-efficacy as an indicator of one's ability to manage a school (McCollum & Kajs, 2015), exercise position of authority to direct change (Lyons & Murphy, 1994), influence on student performance outcomes and principal's perception of job autonomy, job satisfaction and contextual constraints (Federici, 2013), all which have a direct impact on principal turnover.

Principal Self-Efficacy

The influence a principal has on a school is second only to the impact of a teacher on student learning (Leithwood, Louis, Anderson, & Wahlstrom 2004). To realize this impact, successful leaders must believe in their ability to influence, direct processes, set goals, and motivate others to action. This type of principal leadership is of greater importance in schools struggling to meet student proficiency (Leithwood, et al., 2004; Branch, Hanushek, & Rivkin 2009; Hallinger & Heck 1998). The actions principals take is in direct relation to what they feel about their ability, which can support or hinder their effectiveness. While there is a surplus of research about successful leadership practices, there is a lack of research addressing how leadership beliefs are shaped and/or sustained within organizational context that validate or contradict principal self-efficacy.

Principal self-efficacy is defined as principals' belief in their aptitude to induce change in the schools they lead despite the challenges they face (Tschannen-Moran, 2005). McCullers & Bozeman (2010) postulate that principals with elevated self-efficacy show greater commitment and persistence in goal attainment. Dimmock & Hattie (1996) state principals exemplify leadership when they act and behave in ways that motivate others to action. Change or improvement, therefore, happens as a result of how the principal influences organizational movement. This type of mass movement or shifts in practice is indicative of transformational

leadership (Daly et al., 2001; Osterman & Sullivan, 1994) and requires a strong sense of efficacy.

Principals with high levels of self-efficacy are more likely to persevere when faced with challenges. The opposite can be said for principals who hold low self-efficacy. Low efficacious leaders often doubt their own abilities and relinquish their authority to manage a situation. In School Leadership That Works (2012), Hallinger claims that based on the "preponderance of evidence" (p. 12), principals impact student outcomes through the actions they take to cultivate a school environment that supports school effectiveness. According to Chemers, et al. (2000), principal efficacy is fundamental to their leadership as it is related to their "followers' commitment" to the goals of the organization. Leithwood and Jantzi (2008) reported on school leaders' collective efficacy as an essential link between district and school conditions and their effects on student achievement.

At an increasing rate, the research on self-efficacy in education concentrates on self-efficacy as a means to explore beliefs, attitudes, and practices among teachers and students, with less attention being given to the efficacy of principals. This study adds to the limited body of literature on the self-efficacy of principals, adding how district climate correlates to levels of principal self-efficacy. This is significant as the environment in which principals lead determines the actions they take and the resilience they demonstrate when faced with obstacles.

To steer school improvement, principals must be able to set goals, develop people, and foster a learning environment in order to raise achievement. Self-efficacy serves as the springboard for principals to direct the school organization towards meeting student achievement goals. Further, it provides useful guidance for principal preparation programs to build principals' self-efficacy that will support effectiveness and job satisfaction.

Measuring Principal Self-Efficacy

Tschannen-Moran and Gareis (2004) noted that principal efficacy has been difficult to measure in part because of self-efficacy beliefs being context specific. In "Principal's Sense of Efficacy: Assessing a Promising Construct" (2004), the authors suggest that self-efficacy measures should identify the strength and level of successful leadership practices within a given context. The context in which leaders lead include institutional, community, socio-cultural, political, economic, and school improvement, each of which shape school leadership practices. Tschannen-Moran and Gareis' 2004 article expounded on three early measures of principal efficacy, the first offered by Hillman (1986).

Hillman's (1986) efficacy measure asked principals to identify the likely cause to 16 events. Each item assessed principals' response to four items related to the situation or "context" of the principal, the second to the effort exhibited, the third to task difficulty, and the fourth to chance. Tschannen-Moran et al. (2001) argue that Hillman's scale is more aligned to attribution theory rather than Bandura's Social Cognitive Theory. Further, the scale restricted the respondents' choice making it difficult to measure as a valid measure of principal self-efficacy.

The second measure of principal self-efficacy measured perceived self-efficacy and perceived efficacy in student and school-oriented tasks introduced by Imants and De Bradbander (1996). This scale offered a unique but unpromising instrument to measure principal self-efficacy as the results demonstrated that teacher efficacy was related to student outcomes while principal efficacy was more focused on school-oriented tasks.

Dimmock and Hattie (1996) provided the third measure for principal self-efficacy. This measure presented principals with situational vignettes in leadership areas comprised of staff, teaching and learning, staffing, budgeting, parents, and the school environment. Tschannen-

Moran and Gareis (2004) postulated that of the three, Dimmock and Hattie's measure was a more effective measure of principal self-efficacy. The PSES is also modeled after the ISLLC standards, formerly educational leadership standards.

Tschannen-Moran and Gareis (2001) conducted a study to provide a confirming and reliable tool to measure principal self-efficacy. Having explored principal efficacy measures previously offered by researchers, Tschannen-Moran and Gareis modified Goddard's et al. (2000) measure of collective teacher efficacy and the teacher sense of efficacy scale (TSES) (Tschannen-Moran and Woolfolk Hoy, 2001). The existing measurements of principal self-efficacy undertook three different studies before deeming PSES as the most reliable (Tschannen-Moran & Woolfolk Hoy, 2001).

The modification of both scales yielded the principal self-efficacy scale (PSES). The PSES is comprised of 18 questions designed to measure principals' self-efficacy to lead in the areas of instruction, management, and moral leadership (Tschannen-Moran & Gareis, 2004).

PSE for Managerial Leadership. Managerial leadership efficacy is a subscale on the PSES that measures principal efficacy to manage the operations of the school. The items speak to how principals handle the demands of the job, administrative paperwork, time management, and shape the operational policies and procedures of the job (Table 1).

Management efficacy gives attention to principal resilience and organizational efficiency. The research shows that principals identify the managerial tasks of the role as occupying most of their time, removing them from spending time on "meaningful leadership issues, such as school climate, instructional improvement, and professional development for teachers" (Boyland, 2003, p. 7). Leithwood (2007) highlights that for effective principal leadership, principals cannot exclusively attend to the managerial aspects of the role; they need to enact all functions of

leadership. Fullan (2000) confirms Leithwood's (2007) position, noting that solely attending to the administrative tasks and inattention to the other duties of the principalship is not sufficient to address school improvement efforts.

Boyland's (2011) review on job stress and coping strategies of elementary school principals suggested that supportive measures be considered to assist principals in dealing with the increasing stress, diversity, and demands of the principalship. Boyland's (2011) study spoke of principals reporting not having sufficient time to "adequately … [and] … efficiently handle every aspect of the job" (as referenced in Brock & Grady, 2002; Carr, 1994; Queen & Queen, 2005).

Principals' effectiveness and their ability to handle the complexities of their role is impacted by how well they allocate their time to address the organizational and instructional tasks of the job (Rice, 2010). Effective principals allocate their time on the important features of organizational management and instructional leadership. Principals who are selective in the tasks they choose to complete daily experience greater success in managing the day-to-day operations of the school, perhaps reducing burnout and increasing efficacy for managerial leadership (NASSP, 2013). Researchers Horng, Klasik, and Loeb (2010) reported that on average, principals spend less than 10% of their time on tasks associated with instruction.

Principals' efficacy for handling the managerial aspects of their role affords them with the time needed to meaningfully interact with aspects of the principalship and leads to improved school outcomes.

PSE for Instructional Leadership. Principals' "capacity for instructional leadership" was found to be a cornerstone for school improvement efforts (Louis et al., 2010, p.140). Instructional leadership efficacy measures principals' assessment of their ability to promote

academic achievement. Instructional leadership efficacy items speak to how principals create a shared vision for the school, address student achievement, create a nurturing learning environment, motivate teachers, and manage change within their schools (Table 1).

Instructional leadership suggests that principals focus on classroom practice and building teachers' capacity to deliver effective instruction. Instructional leadership theory originated in the early 1980s with educational researchers reporting on poor urban schools with high levels of student achievement despite the conditions students and schools faced (Edmonds, 1979). Bossert, Dwyer, Rowan, and Lee (1982) reported that these schools were successful in part because of the presence of strong instructional leaders. Strong instructional leadership is evidenced among principals who were able to provide meaningful and actionable feedback to teachers, able to set a vision for the school, had high teacher expectations, and built positive school cultures.

Hallinger (2005) reported instructional leadership as a key construct and related to three domains of influence: "defining the school's mission, managing the instructional program, and promoting a positive school learning climate" (p. 225).

Robinson, Lloyd, and Rowe (2008) conducted a metanalyses of 22 studies examining the impact of leadership styles on student outcomes. The results of their study noted that the average effect of instructional leadership on student outcomes was three to four times that of transformational leadership. Their study revealed five sets of leadership practices or dimensions: "establishing goals and expectations; resourcing strategically; planning, coordinating, and evaluating teaching and the curriculum; promoting and participating in teacher learning and development, and ensuring an orderly and supportive environment" (p. 435).

The research on the impact of the principal as an instructional leadership is of no

shortage. Leithwood et al. (2008) report the role of principals and their impact on student outcomes through their "influence on staff motivation, commitment, and working conditions" (p. 27). Louis and Wahlstrom (2012) note that "principal instructional leadership and shared leadership have significant effects on teachers' working relationships (professional community). Interestingly, the same holds true for school districts that foster learning communities among central office staff and provide principals with vicarious learning experiences. Through these collaborative partnerships principals solidify their professional practice and skill sets (Honig, Copland, Rainey, Lorton, & Newton, 2010).

The intentionality of principals in creating collaborative and supportive school cultures is supported by Mascall and Leithwood (2012), "who assert that school leaders affect student achievement when they exert their considerable impact on school culture to improve influencing instructional practice" (Landy, 2013).

PSE for Moral Leadership. Moral leadership efficacy is a subscale on the PSES that considers principals' perceptions concerning their ability to promote ethical school behavior, a culture and climate that promotes school spirit, and encourages acceptable student behavior (Tschannen-Moran & Gareis, 2004). The PSES principal efficacy items for moral leadership speak to principals' beliefs about their ability to promote ethical behavior among all stakeholders, promote acceptable behavior among students, promote school spirit, and promote the prevailing values of the school community (Table 1).

Researchers on organizational theory have reported the importance of giving attention to culture as it is the most "important action that a leader can perform" (Macneil, Prater, Busch, 2009, p. 73). The surplus of research on school climate maintains that schools with sound school cultures influence teacher motivation. Highly motivated teachers exert greater influence on

student achievement as a result of the high expectations they have of students (Macneil et al., 2009). Hallinger and Heck (1998) posit that principals impact student performance in how they direct the climate and culture of the school in which they lead. Fink and Resnick (2001) speak to the role of the principal in establishing a "pervasive culture of teaching and learning in each school" (as cited in Macneil et al., 2009, p. 73). Watson (2001) cautioned educators that a school void of a strong culture is correlated to low student outcomes. Sebastian and Allensworth (2012) identify "learning climate" (p. 19) as the primary means through which to improve student performance.

Table 1

Dimensions of Principal Self-Efficacy

PSE Dimension	PSES Items	Item #
Efficacy for Instructional Leadership	Motivate teachers Generate enthusiasm for a shared vision for the school Manage change in your school Create a positive learning environment in your school Raise student achievement on standardized tests	
Efficacy for Management	Handle the demands of the job Handle the paperwork required of the job Maintain control of your own daily schedule Prioritize among competing demands of the job Cope with the stress of the job Shape the operational policies and procedures that are necessary to manage your school	
Efficacy for Moral Leadership	Promote acceptable behavior among students Promote school spirit among a large majority of the student population Handle effectively the discipline of students in your school Promote a positive image of your school with the media Promote the prevailing values of the community in your school Promote ethical behavior among school personnel	

Adapted from "Principal's Sense of Efficacy: Assessing a Promising Construct," by M. Tschannen-Moran and C. R. Gareis, 2004, *Journal of Educational Administration, 42,* 5, p. 581.

The Principalship in Context

Schools reflective of student achievement are aligned to principals with high self-efficacy to set goals, develop people, and reframe the organization. Pajares (1996) expressed the need for school districts to understand their role in developing principal self-efficacy. The context and structure of schools yield complex systems that potentially serve to undermine the ability of principals to lead and sustain improvement efforts (Blase & Blase, 1999). There is a surmounting body of evidence to suggest the relationship between the actions of principals on student achievement (Kafka, 2009, p. 318). In fact, the principal has been lauded as "the prime factor in the success of an individual school … and no amount of itinerant supervision can supply his place" (as cited in Pierce, 1935, p. 39). Leithwood (2007) would argue that successful leadership is contingent on the qualities and skills allowing principals to understand the problems they face and how they respond to them within their given context. Government-defined policies increase the accountability placed on principals to lead successful schools; however, national agendas, such as *Every Student Succeeds Act 2015*, removes the school level administrator from setting her own vision and agenda for the school as central office often directs the setting of goals for its schools. Given this context, principals must produce change, but they must also believe in their ability to do so.

Hallinger (2005) and his colleagues reported the scarcity of research examining the impact organizational contexts places on principals despite the influences it has on their ability to lead. Since then, the research on organizational context has increased, theorizing context as antecedents or moderators (as cited in Day, et al., 2011). Contextual antecedents are hypothesized to imply what leaders do in response to their environment. As such, Tschannen-Moran & Gareis (2005) argue that it is paramount to understand the sources of information that

principals extract when making judgments about their efficacy as school leaders" (p. 23).

District Climate

The research on organizational climate with discussion on the climate evidenced in workplaces such as factories dates back to the 1960s. Research has only recently begun to shed light on the role of the school district as an organization in improving student achievement. The school district as an organization was described by Rorrer et al. (2008) as a unit composed of the superintendent, the central office or district leaders, and the principals working collectively to set high expectations, cultivate high-performing teachers, establish community partnerships to support educational initiatives, and the involvement of parents to effect student outcomes. The research, however, on the school district as an organization and its role in supporting principals' efficacy to lead reform efforts has only recently surfaced. The research still continues to place an emphasis on climate at the school level, void of the role of central office conditions that support principals' efforts to lead school improvement.

DiPaola and Smith (2008) define district climate as the "collective efforts by all individuals within an organization that foster actions to help the organization effectively reach its goals." DiPaola and Smith (2008) described district climate as "the barometer of the actions required in a successful reform effort: dynamic leadership of the superintendent, enabling organizational structures, and teamwork that supports student success" (p. 120). They posited that the three dimensions of district climate serve to influence principals' actions to lead school reform at the building level are most efficacious when dynamic superintendent leadership, enabling organizational structures, and teamwork for student success was evidenced at the district level first.

The characteristics of district climate include an openness to innovation, commitment to

change, and new information. Effective district climates are receptive to failure as a strategy to lead improvement efforts. Open or enabling district climates create structures that "foster trust, facilitate problem solving, enable cooperation, and encourage innovation" (DiPaola and Smith, 2008, p. 118).

Fullan (2001) reports on the significance of the district in making certain that its climate is managed so that through collective efforts, stakeholders demonstrate commitment to a shared goal. He posits that commitment and a shared vision for success is achieved when there is coherence between district initiatives and work output. Fullan states, "Coherence is the greatest need for complex systems" (2015).

In the last ten years, the research on educational leadership has reported the need for superintendents and school boards to reconsider district structures and assistance to schools in an effort to effectively support the school improvement process (Bottoms and Fry, 2009). American Institutes for Research (2010) stated, "School-level leadership is most productive when couched within a supportive and consistent district-level leadership that sets the vision and expectations but is willing to step back and take the risk of allowing the principal of the school to lead with some autonomy" (p. 5).

A Southern Regional Education Board's (SREB) (Bottoms and Fry, 2009) report on principals' perspective of their relationship with the school district as their spending "time and effort finding ways to work around the district office to improve student achievement" (p. v). Principals interviewed in the Bottoms and Schmidt-Davis' SREB (2009) report spoke of their having to navigate and form personal relationships with district office staff to obtain the support needed to manage and lead their schools. SREB's research exposed lower-performing school districts' failure in providing adequate staff support, technical assistance, professional learning,

data analysis, or resources to help at-risk students. Their findings further shed light on the plight of underperforming schools and principals' inability to lead with high levels of efficacy because of the scarcity of resources and district support.

Leithwood, et al. (2007) sought to identify the specific factors contributing to principal efficacy. The findings from the study showed that high principal self-efficacy was evident in districts where there was a clear focus on student achievement, meaningful teacher professional development, and a clear and shared vision for the organization. The findings from Leithwood et al. (2007) are consistent with Hoy and Sweetland's (2001) characteristics of enabling school structures (ESS). Hoy and Sweetland's (2001) concept of enabling school structures explored the interaction of principals' perception of their districts and principal self-efficacy. It is important to recognize, however, a limitation of the research conducted by Leithwood et al. (2007) and Hoy & Sweetland (2001); they only provided evidence for the relationship existing between district-level characteristics and its impact on student achievement, but did not report the relationship between district conditions and antecedents to principal self-efficacy.

Bottoms and Schmidt-Davis' 2010 SREB study sought to examine the charge of school districts in creating conditions for principals to improve teacher performance and students and the middle and secondary levels. The findings warned school districts of holding principals accountable for school improvement from a top-down approach without providing principals with support of direction. They touted school districts as being supportive or enabling when "district and school board leaders exhibited a clear vision of what constitutes a good school and have created a framework in which the principal has autonomy to work with faculty on an improvement agenda with collaborative support from the district" (p. ii.). Federici (2013) reported that contextual constraints to principal autonomy were negatively related to job

satisfaction, further adding to principal turnover and/or decreased rates of efficacy levels.

Louis et al.'s (2010) regression analysis identified eight district characteristics correlated to school principals' sense of efficacy relative to a: "focus on quality (.39), district culture (.38), use of data (.35), job-embedded professional development for teachers (.35), relations with schools and stakeholders (.35), targeted improvement (.31), investment in instructional leadership (.23)," and most significantly, an "emphasis on teamwork (.45)" (p. 134). Louis et al. (2010) claimed that these characteristics are "significantly moderated by a handful of district characteristics, [including] school size, district size, school level, and frequency of principal succession" (p. 139).

New Leaders and the Bush Institute's Alliance to Reform Education Leadership (AREL) launched the Conditions for Effective Leadership Project (2014.p. 4) in which they stated:

> "Even in the many districts with positive school-central office relationships, these interactions are sometimes characterized by bureaucratic formality. Creating the conditions for school leader success requires both more effective district systems to support effective leadership practice and a radically different district culture in which district staff and school leaders support one another, hold themselves and one another accountable, and work together as partners to reach shared student achievement goals. There must be a shift away from a compliance-based "gotcha" culture to a developmental culture where school leaders are encouraged to take risks and are supported in their efforts to achieve shared district and school-level goals of student achievement progress. While these are the kinds of cultures on which high-performance results are built, they are not yet the norm in many school systems."

Table 2

Nine Characteristics of Successful School Districts

1. A broadly shared mission, vision and goals founded on ambitious images of the educated person
2. A coherent instructional guidance system
3. A deliberate and consistent use of multiple sources of evidence to inform decisions
4. A learning-oriented organizational improvement processes
5. Job-embedded professional development for all members
6. Budgets, structures, personnel policies and procedures, and uses of time aligned with the district's mission, vision and goals
7. A comprehensive approach to leadership development
8. A policy-oriented board of trustees
9. Productive working relationships with staff and other stakeholders

(Leithwood, 2007)

Leithwood's characteristics of successful school districts is also influenced by a district's organizational structure. The way a district operationalizes itself or establishes structures allowing for increased collaboration and teamwork amongst departments can serve to address principal self-efficacy and more importantly improve systems for effective school and district management. The configuration of the district serves to fulfill the district's agenda of improving student performance. How the district establishes its teams, departments, allocation of tasks, responsibilities, and personnel defines its organizational structure. How well the district does this and under what culture and climate conditions will determine the success of this structure. Oliveira & Takahashi (2012) reported that structures are developed based on product or function. Alfred Chandler (2003) added to this, stating that organizational structure is determined by organizational strategy. A school district's strategy would consist of its vision and mission. Mintzberg's organizational structure theory (1992) suggests an organization's strategy and how

it carries out that strategy "results in a simple structure, machine bureaucracy, professional bureaucracy, divisionalized form, and adhocracy" (Luneberg, 2012, p. 1). Mintzberg states that organizations are differentiated by three dimensions: (1) the primary, the part of the organization that plays the major role in determining its success or failure; (2) the major method the organization uses to coordinate its activities; and (3) the type of decentralization used; that is, the degree to which the organization includes subordinates in the decision-making process. Organizational structure theory may serve to further explain the dimensions of district climate, integrated superintendent leadership, teamwork for student success and enabling school structures. Table 3 provides a visual representation of the alignment of Mintzberg's three dimensions of organizational structure and DiPaola and Smith's (2008) three dimensions of district climate.

Table 3

Comparison of Organizational Structures and District Climate

Alignment of Organizational Structures and District Climate		
Mintzberg's Dimensions of Organizational Structures	**Persons Responsible**	**DiPaola & Smith's Dimensions of District Climate**
The primary part of the organization that plays the major role in determining its success or failure	Board of Education Superintendent Principals	Integrated Superintendent Leadership
The major method the organization uses to coordinate its activities	Content Area Supervisors Central Office Departments Principals and Vice Principals	Enabling School Structures
The type of decentralization used, that is, the degree to which the organization includes subordinates in the decision-making process.	Central Office Staff Content Area Supervisors Principals Teacher Leaders Parents and Students	Teamwork for Student Success

Social scientists furthered these claims stating that organizational strategy is influenced by its environment, technology, and tasks (Luneburg, 2012). Environment as a constituent of organizational structure is key to this research as the environment speaks to the district conditions or climate that correlate with principals' levels of self-efficacy. The link between strategy and structure is still in its infancy stage, particularly as it relates to schools. As strategy is influenced by the context in which it is being explored, school administrators should understand this relationship and its impact on school leader efficacy.

Measuring District Climate

The study of school climate was pioneered by Halpin and Croft's Organizational Climate Description Questionnaire (OCDQ, 1963). The OCDQ is a sixty-four-item Likert scale questionnaire used to assess teacher–teacher and teacher–administrator interactions found in schools. The OCDQ characterizes climate as open or closed, though the tool measures climate at the school level. Similarly, Hoy's Enabling School Structures scale (ESS, Hoy, 2008) measures climate as enabling or hindering, again with the relationship between teacher and administrator serving as the focus to measure school climate. DiPaola and Smith (2008) recognized that the district's organizational structure is responsible for providing direction and support, and is vital in helping schools become successful. DiPaola and Smith (2008) also recognized the absence of an available instrument to measure climate at the district level. As such, they developed the District Climate Index (See Table 4).

Table 4

District Climate Index

Integrated Superintendent Leadership
The superintendent is willing to make changes.
The superintendent is friendly and approachable.
The superintendent is responsive to the needs and concerns expressed by administrators.
The superintendent is responsive to the needs and concerns expressed by community members.
The superintendent explores all sides of topics and admits that other opinions exist.
The superintendent treats all administrators as his or her equal.
The superintendent maintains definite standards of performance.
The superintendent puts suggestions made by administrators into operation.
The superintendent lets administrators know what is expected of them.
Enabling District Structure
Our district has implemented an effective process for monitoring progress and achieving goals. Our district incorporates student assessment data into all appropriate decisions.
Our district systematically monitors the progress of school improvement.
Data on district operations are reviewed regularly to determine progress in achieving goals. District supervision/evaluation criteria include a measure of staff accountability.
District policies and procedures recognize that student learning supersedes administrative convenience.
The monitoring process results stimulate significant improvements in the district.
Results of the monitoring process lead me to review my own practices.
Members of district departments have a detailed understanding of how their work relates to that of other departments.
The organizational structures of the district facilitate the day-to-day work of all staff groups. Staff members are aware of our district mission and goals.
District leaders assist staff members in finding resources to accomplish their goals.
District support to my school reflects the school's unique needs.
I can communicate with most other members of the district.
Teamwork for Student Success
Administrators provide strong social support for colleagues.
Principal create learning environments that are orderly and serious.
Administrators respect the professional competence of their colleagues.
Administrators help and support each other.
Administrators are committed to helping students.
The interactions between and among administrators are cooperative.
I have confidence in the integrity of my colleagues.

DiPaola and Smith (2008)

The DCI evolved out of a multi-phase process involving a pilot study producing a set of items to measure the dimensions of district climate, a reduction in test items that failed to meet determined criteria, followed by a test to examine the correlation between school and district climate after controlling for socioeconomic status. The result was a 30-item district climate measure with three subtests, integrated superintendent leadership, enabling district structure and teamwork for success, all with high reliability rates.

Integrated Superintendent Leadership

Integrated superintendent leadership recognizes the superintendent as the primary charged with initiating change. Integrated superintendent leadership identifies the behaviors and actions that serve to foster trust and collaboration. Marzano and Waters (2009) described the implications of effective leadership from the district level by establishing a relationship between district leadership and student achievement. According to Shannon and Bylsma (2004), "the focus of the superintendent's attention communicates commitment and signals the level of its importance. Superintendents who focus on instruction send a significant message to the central office staff and schools. The superintendent's theory of action tends to influence and provide a foundation for a shared central office theory of action" (p. 16). DiPaola and Smith (2008) characterize integrated leadership as superintendent leaders who are responsive, flexible, approachable, clear communicators, and guided by high standards of performance.

Enabling District Structure

Undoubtedly, federal and state policies influence schools' choices in their approach to improving student learning outcomes; however, despite federal oversight, it is the district office that must support principals in translating policies to improve school practices. Hoy and Sweetland (2000) characterized district structure as bureaucratic organizations that formalized

coercively or enabling (Figure 2). Formalization was classified as enabling or coercive. Hoy and Sweetland (2000) advised that "procedures invite two-way communication, seeing problems as opportunities, encouraging differences, trusting, adjusting easily to mistakes, learning from mistakes, and delighting in the unexpected" (p. 527). An enabling district structure speaks to goal articulation, accountability, and oversight, limiting bureaucratic practices that hinder individual or collective performance. District staff members understand that their role is to support principals, not thwart their efforts. Tschannen-Moran & Gareis (2004) reported that principals perceived their efficacy levels comparatively based on the support provided by the superintendent and the central office (p. 21).

DiPaola and Smith (2008) captured the characteristics of enabling district structure by identifying structures for resource allocation, progress monitoring and assessment, accountability, a focus on student learning, coherence, and collaboration between and among departments, communication of goals and expectations and differentiated support to schools within the district.

Characteristics of Enabling Rules and Procedures	Characteristics of Coercive Rules and Procedures
Two-way communication	One-way (top-down) communication
Viewing problems as opportunities	Viewing problems as constraints
Encouraging differences	Suspecting differences
Promoting trust	Promoting distrust
Learning from mistakes	Punishing mistakes
Delighting in the unexpected	Fearing the unexpected

Figure 2. *Enabling and Coercive District Cultures* (Hoy and Sweetland, 2000)

Teamwork for Student Success

Teamwork for student success refers to observable instructional rigor teaching and learning, and collective efficacy evidenced in collegial relationships and a "commitment to the success of all students" (DiPaola and Smith, 2008, p. 14). DiPaola and Smith (2008) capture teamwork for success by identifying the manner in which the district creates opportunities for professional growth, supportive networks, and believe in the capacity of the staff. District staff members understand that their role is to support principals, not circumvent them. Spillane and Thompson (1997) found that the capacity to move a district forward relied on the transference of knowledge, skills, commitment, and disposition from a district level to the classroom (human capital), creating a need for professional networks, trust, and collaboration (social capital), and the fiscal resources to effectively support the professional networks and collaboration that was believed necessary for school improvement.

Leithwood and Jantzi (2008) reported on the role of district leaders in building collective efficacy amongst principals by fostering collaborative relationships with schools and their principals to support school improvement efforts. According to Shannon and Bylsma (2004), "This lateral capacity building will extend, deepen, and help sustain system change" (p. 47). According to researchers Fullan, Bertani, and Quinn (2004), "Teams working together develop a clear, operational understanding of their goals and strategies, fostering new ideas, skills, and a shared commitment to district-wide development" (p. 44).

Teamwork for Student Success suggests a district climate that is centered on teaching and learning, built on trust, respect, collaboration, and a commitment to the achievement of all students (DiPaola and Smith, 2008). With Teamwork for Student Success, principals can depend on a collaborative network allowing them to serve as leaders and managers of schools with high

levels of self-efficacy. The role of central office in supporting principals' success is complex and requires collaboration and cooperation from the departments within the district. Principals are able to work with increased efficiency when well-coordinated and defined operational systems are in place.

DiPaoloa and Smith's (2008) contribution to educational research through its discussion on enabling school structures provides a means to look at the impact district leadership and the manner in which it is organized to support school leaders is impactful in offering a new lens to improve student outcomes.

Summary

This chapter provided a review of the literature on the evolving role of the principal in response to increased federal accountability under *Every Student Succeeds Act 2015,* Bandura's Social Cognitive Theory of Self-Efficacy, Tschannen-Moran and Gareis' Principal Self-Efficacy Scale (PSES, 2004) and DiPaola and Smith's District Climate Index (DCI, 2008). In this era of increased accountability, Bottoms and Schmidt (2009) suggest that district leadership transition from oversight of principals to "providing the capacity-building support that true district-school partnerships require." They further state, "The research is clear and overwhelming: If school districts want high-achieving high schools, they must empower principals to be leaders of change" (p. 9).

Chapter III

Research Design and Methodology

The purpose of this study was to examine the relationship between principal self-efficacy and district climate on public school principals in the state of New Jersey. Recent studies on what constitutes an effective school emphasize the role of the school district on improving student achievement (Brady, 2003); however, the literature is only recently beginning to surface. This study employed the Principal Self-Efficacy Scale (PSES) developed by Tschannen-Moran and Gareis (2004) and the District Climate Index (DCI) constructed by DiPaola and Smith (2008) to explore the relationship of district climate on principals' efficacy to lead successful schools.

Research Questions

The purpose of the study was to explore relationship between district climate and principal self-efficacy using the following research questions:

1. To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the managerial aspects of leadership (Managerial PSE)?
2. To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the instructional aspects of leadership (Instructional PSE)?
3. To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the moral aspects of leadership (Moral PSE)?
4. Which dimension of district climate has the strongest association on principals' total self-efficacy?

Research Design

The research design for this study was a descriptive quantitative correlational analysis.

Quantitative research allows the researcher to "obtain data using predetermined validated instruments and statistical procedures that serve to refute or confirm a hypothesis (Creswell, 2003, p. 153). Correlational research investigates the relationship between variables (Gay, Mills, & Airasian, 2012). The independent variable was district climate, with principal self-efficacy as the dependent variable. Quantitative descriptive statistics allow the researcher to account for educational trends (Gall, Gall, & Borg, 2005); in this case, the extent to which district climate influences principal self-efficacy. The descriptive method was a suitable method for this study because descriptive studies are concerned primarily with determining "what is" (Gall, Gall, & Borg, 2005). Orodho (2003) defines survey research design as a means to collect information on a sample population.

Study Sample

While there are a number of approaches used to arrive at a sample size (Gay, 1996), this study aimed for a participation rate of 30% of the population of all public school principals in Essex County, New Jersey at the time of the data collection process. According to Gall and Borg (2003), this is a suitable sample size as it will ensure a sufficient portion of the population will be included in the study and allow for generalizations to be drawn from the analyses. However, because of the COVID-19 pandemic, the response rate was not achieved; a total of 42 principals from Essex County, New Jersey responded to the survey. The response rate did not impact the study findings as the respondent pool hailed from various school levels and types, had varying years of experience serving as a principal, with only a small number of principals having participated in a principal preparation program. As principal respondents were represented in each of the school and professional characteristics, the analyses of data allows for some generalizations to be made. Participant recruitment commenced following approval from the

Seton Hall University Institutional Review Board (IRB). Participation in the study was voluntary based on the principal's submission. Principals were introduced to the study via email obtained from the New Jersey Department of Education's email database. The invitation explained the purpose of the survey, informed participants of preservation of anonymity and directions on how to access the electronic survey instrument. The survey remained open for a period of three weeks, with email reminders sent out on a weekly basis (Sue and Ritter, 2012). The theoretical framework for this study was grounded in Bandura's Social Cognitive Theory of Self-Efficacy and illustrated by Tschannen-Moran and Gareis' (2004) construct of principal self-efficacy.

Participants

The participants in this study were public school principals from Essex County, New Jersey. The participants were emailed the combined demographic PSES (Tschannen-Moran & Gareis, 2004) and DCI (DiPaola & Smith, 2008) using an online commercial program, www.surveymonkey.com. At the time the survey was released, 238 principals in Essex County, New Jersey were invited to participate. The projected response rate was seventy principals, which would have represented 30% of the sample population, reported by Gall & Borg (2003) to be an acceptable sample size allowing for generalizations to be drawn from the analyses. As a result of COVID-19 and subsequent school closings across the state and nation, 42 of the 70 intended population sample responded, representing a 17.6% return rate. Data from the survey was entered into version 26 of SPSS analytical software.

Instrumentation

The survey instruments used to gather data for this study was a six-item demographic questionnaire, the Principal Self-Efficacy Scale (PSES, Tschannen-Moran & Gareis, 2004), and

the District Climate Index (DCI, DiPaola & Smith, 2008), which were approved for use by their respective authors (see Appendix C and Appendix D).

Demographic questionnaire. The demographic questionnaire was developed to identify school and professional characteristics of participants for descriptive purposes only. The results of the demographic survey was not correlated with the dependent or independent variables.

Principal Self-Efficacy Scale. The PSES was used to measure principal self-efficacy perceptions. The PSES is an 18-item survey that uses a nine-point Likert scale to measure the attitudes and beliefs of principals regarding their perceived ability to lead and the resilience to persevere. Survey descriptors range from 1 (none at all) to 9 (a great deal). The survey provided a full-scale score for overall principal self-efficacy perceptions based on the mean responses to all 18 items. The PSES also provided a mean subscale score for the six items in each of the three dimensions of principal self-efficacy: PSE for Management, PSE for Instructional Leadership, and PSE for Moral Leadership (see Table 1). Scores ranged from 18 to 162, with higher scores reflecting a higher sense of principal efficacy. The PSES scale provided a strong indicator of principals' beliefs about their ability to lead with factor loadings at each subscale as high as .89. Factor loadings showed the amount of variance explained by the variable on a particular item. High factor loadings signified a high correlation between the individual items within the subscales, offering the instrument as a valid construct to measure PSE (Tschannen-Moran & Gareis, 2004).

District Climate Index Scale. The District Climate Index (DCI) is a thirty-item Likert scale with descriptors ranging from 1 (never) to 5 (very frequently) measuring what DiPaola and Smith have identified as three critical organizational properties of school districts: integrated superintendent leadership, enabling district structure, and teamwork for student success.

Data Collection

Survey research uses scientific sampling and offered the researcher an efficient and easily standardizable method of managing and comparing data between groups. The demographic survey, Principal Self-Efficacy Scale, and District Climate Index were hyperlinked in the email to participants explaining the purpose of the study, voluntary participation, and that their accessing or completing the survey implied consent. The survey remained open for a period of three weeks with email reminders sent to participants on a weekly basis.

School Characteristics

Table 5 summarizes the school characteristics of the survey respondents. The descriptive analyses indicated that the majority of participants (69%) served as principals in elementary schools. Participants (45%) reported leading in schools with an enrollment size between 300 and 500 students, with 80% from lower-performing school district. Respondents (64%) reported that 76% or more of their students were eligible for free or reduced-priced lunch.

Data Analysis

Data obtained from the surveys was inputted into the analytical software, SPSS. A descriptive analysis of each variable, including the calculation of means and standard deviations, was explored to look for patterns in the data. An external professional consultant was secured to assist with data analysis. For each variable, a correlation coefficient, Pearson's *r*, was conducted to determine the strength of probable relationships between each of the pairs of continuous variables (Muijs, 2004). Further, a linear regression analysis was conducted to determine the amount of variance in principal self-efficacy explained by district climate.

Summary

This chapter outlined the methodology used in this study to examine the relationship between principal self-efficacy and district climate for public school principals in Essex County, New Jersey. Participants were sent a combined online survey consisting of a demographic questionnaire, the PSES, and the DCI. The data was analyzed using SPSS. Chapter IV explains the results of the study and Chapter V explains the implications of the data.

Chapter IV

Results

The purpose of this study was to examine the relationship between district climate (i.e., superintendent leadership, enabling structures, and teamwork for student success) and principal self-efficacy (i.e., self-efficacy for management, instructional leadership and moral leadership). Adopting Social Cognitive Theory as the theoretical framework, this study built upon Albert Bandura's construct of self-efficacy as an indicator of principal effectiveness using Tschannen-Moran and Gareis' PSES (2004) and DiPaola and Smith's DCI (2012) to measure each construct. The context in which principals' work has been reported to have a positive or negative influence on principals' leadership efficacy (Tschannen-Moran & Gareis, 2004).

The research questions were designed to examine the relationship between district climate and efficacy aspects of leadership. To explore the relationship between district climate and principal self-efficacy, public school principals in Essex County, New Jersey participated in a combined demographic survey, the PSES (Tschannen-Moran & Gareis, 2004), and the District Climate Index Scale (DiPaola & Smith, 2008) for a total of 54 items.

The following research questions were designed to guide the study:

Research Question 1: To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the *managerial aspects of leadership* (Managerial PSE)?

Research Question 2: To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the *instructional aspects of leadership* (Instructional PSE)?

Research Question 3: To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the *moral aspects of leadership* (Moral PSE)?

Research Question 4: Which dimension of district climate has the strongest association with the three dimensions of principals' total self-efficacy (management, instructional leadership, and moral leadership) (Total PSE) when controlling for demographics?

This chapter was organized to answer each of the research questions providing the data obtained from the analyses correlating the data to the dimensions of district climate and the dimensions of principal self-efficacy. The first section reports the descriptive and frequency data of the sampled population. The next section reports the total mean scores and component mean scores. The third section details the relationship and predictive value between and among the dimensions of district climate with principal self-efficacy components. The final section reports the relationship and predictive value of the combined dimensions of PSE and the dimensions of district climate.

Descriptive Analyses of the Sample

The following are the descriptive statistics for the demographic data collected from the participants, organized into school characteristics and professional characteristics. School characteristics were comprised of school level, enrollment, school setting, and the percent of students eligible for free and reduced lunch status. Professional characteristics included years of principal experience and their participation in a principal preparation program. (Table 5).

Table 5

School Characteristics of Principals (N = 42)

School Characteristic	Frequency	Percent
School Level		
Elementary	29	69.1
Middle	8	19.1
High School	8	19.1
Enrollment		
Less than 100	2	4.8
100 – 299	4	9.5
300 – 499	19	45.2
500 – 999	14	33.3
1000 students or greater	3	7.1
School Setting		
Urban	36	85.7
Suburban	7	16.7
% Eligible for Free or Reduced Lunch		
Less than 25%	4	9.5
26 – 50 %	2	4.8
51 – 75%	9	21.4
76% or greater	27	64.3

Professional Characteristics

Table 6 summarizes the professional characteristics of the participants to include years serving in the role of a principal and their participation in a principal preparation program prior to becoming a school principal. Because of the limitations presented by the participant return rate (42 responses), the range of participants' years serving as a principal did not vary by much. The mean years of service was 2.31 or 28.6% of principals (12 respondents) serving between 2 through 5 years and 26% of principals (11 respondents) had more than 15 years serving as a principal. Of the 42 respondents, 45%, or 19 participants reported having participated in a principal preparation program prior to becoming a principal (Table 6).

Table 6

Professional Characteristics of Principals (N = 42)

Professional Characteristic	Frequency (n)	Percent (%)
Years as a Principal		
First Year	2	4.8
2–5 Years	12	28.6
6–10 Years	10	23.8
10–15 Years	8	19.1
15 or more Years	11	26.2
Participation in a Principal Preparation Program		
Yes	19	45.2
No	23	54.8

Descriptive Analyses of Dependent and Independent Variables

PSE Variable Means. The two instruments used in this study were the PSES (Tschannen-Moran & Gareis, 2004) and the DCI (DiPaola & Smith, 2008).

The PSES is an 18-item survey that uses a nine-point Likert scale to measure the attitudes and beliefs of principals regarding their perceived ability to lead and the resilience to face the challenges associated with the role. Survey descriptors range from 1 (none at all) to 9 (a great deal). The survey provided a full-scale score for overall principal self-efficacy perceptions based on the mean responses to all 18 items. The Likert scale responses within the range of 1 to 3 was considered low (L), from 4 to 6 was described as moderate (M), and responses that ranged from 7 to 9 were considered high (H) in the ranking principals' self-efficacy levels. The PSES also provided a mean subscale score for the six items in each of the three dimensions of principal self-efficacy: PSE for Management, PSE for Instructional Leadership, and PSE for Moral Leadership (see Table 1).

The descriptive data provided the total level of PSE, its subcomponents and the variability of self-efficacy responses as noted in Table 7.

Table 7

PSE Means and Standard Deviations (N = 42)

Principal Self-Efficacy	M	SD
Total PSE	7.22	.724
PSE for Managerial Leadership	6.84	.862
PSE for Instructional Leadership	7.39	.767
PSE for Moral Leadership	7.42	.899

Based on the descriptive data on principals' responses to their leadership efficacy, separate from district climate, the mean score for total PSE was 7.22 (*SD* = .724), the mean PSE for Managerial Leadership was 6.84 (*SD* = 6.84), the mean PSE for Instructional Leadership was 7.39 (*SD*=.767), and the mean score PSE for Moral Leadership was 7.42 (*SD* = .899). Based on the PSE descriptive data alone, principals reported having the greatest efficacy relative to Moral Leadership (M=7.42) and the lowest efficacy levels as it related to Managerial PSE (M=6.84). PSE for Instructional Leadership was the second highest level of efficacy reported by principals (M=7.39, *SD*=.767).

DCI Variable Means. The second instrument, the District Climate Index (DCI) (DiPaola & Smith, 2008), examined the level of impact central office and policy personnel had on the school district (DiPaola & Smith, 2008). As the principal is held accountable for implementing reform efforts and district initiatives, the DCI provided information on district characteristics, including district leadership and district conditions, that have been linked to principals' efficacy to lead successful schools. DCI is a thirty-item Likert scale with descriptors ranging from 1 (never) to 5 (very frequently). The Likert scale responses falling below 3 were considered low to moderate and those above 3 were considered moderate to high. The DCI also provided a mean subscale score for the three dimensions of district climate: integrated

superintendent leadership, enabling district structures, and teamwork for student success (DiPaola & Smith, 2008). The descriptive data provided the total level of total DCI, its subcomponents and the variability of district climate responses.

Based on the DCI descriptive data alone, the mean score for total DCI was 4.04 (*SD*=.646), the mean DCI for Superintendent Leadership was 3.98 (*SD*=.858), the mean DCI for Enabling Structures was 3.95 (*SD*=.666), and the mean DCI for Teamwork for Student Success was 4.18 (*SD*=.624) (Table 8). Based on this data, principals reported their district as being enabling or coercive with mean scores for DCI being the highest in the dimension of Teamwork for Student Success (M=4.18), followed by Superintendent Leadership (M=3.98). The Enabling Structures (M=3.95) dimension of district climate was reported as being the least evidenced in participants' respective districts. Enabling Structures and Superintendent Leadership indicated the highest variability (SD=.666 and SD=.858) (Table 8).

Table 8

DCI Means and Standard Deviations (N = 42)

District Climate	M	SD
Total DCI	4.04	.646
DCI for Superintendent Leadership	3.98	.858
DCI for Enabling Structures	3.95	.666
DCI for Teamwork for Student Success	4.18	.624

Results of the multiple linear regression indicated that there was a significant relationship between principal self-efficacy and district climate when controlling for the demographic factors, ($F(7,34) = 2.806$, $p = .020$) $R = .605$ and $R^2 = .366$ meaning that 36.6% of the variance in principals' self-efficacy is explained by district climate.

Research Question1: DCI and PSE for Managerial Leadership Efficacy Correlation Analysis

The first research question sought to answer to what extent district climate correlates to principals' sense of efficacy with regard to the managerial aspects of leadership (PSE for Managerial Leadership). To determine the predictive value of the dimensions of DCI on PSE for Managerial Leadership, a multiple regression and Pearson's Correlation was calculated and analyzed. Multiple regression was used to predict the value of a variable based on the value of two or more other variables (Lund Research, 2020). In answering the first research question, the predictor variable, or dependent variable entered was principal self-efficacy for managerial leadership and the independent variables included the three dimensions of district climate.

Table 9

DCI and PSE for Managerial Leadership Means and Standard Deviation (N = 42)

Variables	M	SD
PSE Managerial Leadership	6.84	.862
DCI for Superintendent Leadership	3.98	.858
DCI for Enabling Structures	3.95	.666
DCI for Teamwork for Student Success	4.18	.624

The results of the Pearson's correlation showed that between the Superintendent Leadership dimension of district climate and PSE for Managerial Leadership, there was a small to medium positive correlation between the two variables, r= .306, N= 42 and the relationship was significant (p=.024). The relationship was statistically significant because the p value was .024, which was less than the threshold for statistical significance (p=<.05). The researcher rejected the null hypotheses as the relationship between PSE for Managerial Leadership and the DCI for Superintendent Leadership did not happen by chance alone, and the Superintendent Leadership dimension of district climate may be a significant predictor for PSE for Managerial Leadership.

Based on the *p* value alone there was evidence to suggest that DCI for Superintendent Leadership has a unique correlation to PSE for Managerial Leadership and is statistically significant.

The results of the Pearson's correlation showed that between the Enabling Structures of district climate and PSE for Managerial Leadership, there was a medium positive correlation between the two variables, $r = .384$, $N = 42$, and the relationship was significant ($p = .006$). The relationship was statistically significant because the *p* value was .006, which was less than the threshold for statistical significance ($p = <.05$). The researcher rejected the null hypotheses as the relationship between PSE for Managerial Leadership and the DCI for Enabling Structures did not happen by chance alone, and that the Enabling Structures dimension of district climate may be a significant predictor for PSE for Managerial Leadership. Based on the *p* value alone there was evidence to suggest that the DCI for Enabling Structures is a unique and statistically contributor to PSE for Managerial Leadership.

The results of the Pearson's correlation showed that between the Teamwork for Student Success dimension of the DCI and PSE for Managerial Leadership, there was a medium positive correlation between the two variables, $r = .472$, $N = 42$, and the relationship was significant ($p = .001$). The relationship was statistically significant because the *p* value was .001, which was less than the threshold for statistical significance ($p = <.05$). The null hypothesis was rejected, as there was less than 1% chance that the relationship between DCI for Teamwork for Student Success and PSE for Managerial Leadership did not happen by chance alone and that the Teamwork for Student Success dimension of district climate is a uniquely significant predictor for PSE for Managerial Leadership.

The results of the correlation indicated that of the three components of district climate, the DCI for Teamwork for Student Success showed the greatest significance ($p = .001$), followed by

DCI for Enabling Structures (p=.006) when correlated with PSE for Managerial Leadership. The DCI for Superintendent Leadership (p=.024) was a weaker, yet a still significant predictor of PSE for Managerial Leadership.

The model proved to be statistically significant with district climate accounting for approximately 22.9% of the variance in PSE for Managerial Leadership (F (3,38) = 3.766, p= .018, R^2 = .229 (Table 10). However, no dimension of DCI offered any significant amount of unique variance in explaining the dependent variable, PSE for Managerial Leadership, as shown in the coefficient analysis table. Consequently, for every point increase in the superintendent dimension of district climate, principals' self-efficacy for managerial leadership decreased by .088 of a point; for every point increase in the enabling structure dimension of district climate, principals' self-efficacy for managerial leadership increased by .168 of a point; and for every point increase in the teamwork for student success dimension of district climate, principals' self-efficacy for managerial leadership increased by .603 of a point (Table 11).

Table 10

DCI and PSE for Managerial Leadership Regression Analysis (N=42)

	R	**R^2**	**SD**	**F**	**Sig.**
Model 1*	.479	.229	.786	3.766	.018**

* PSE Managerial Leadership
**Total DCI (p <.05)

Table 11

DCI and PSE for Managerial Leadership Coefficient Analysis (N=42)

	β	***SE B***	***t***	***p****
DCI _SL**	-.088	-.088	-.392	.697
DCI_ES**	.168	.130	.538	.593
DCI_TSS**	.603	.437	1.99	.053

* (p <.05); ** DCI Superintendent Leadership, DCI Enabling Structures, DCI Teamwork for Student Success

Research Question 2: PSE for Instructional Leadership and DCI Correlation Analysis

The second research question sought to answer to what extent the dimensions of district climate correlate to principals' sense of efficacy with regard to the instructional aspects of leadership (PSE for Instructional Leadership). To determine the predictive value of the dimensions of DCI on PSE for Instructional Leadership, a multiple regression and Pearson's correlation was calculated and analyzed. In answering the third research question, the predictor variable, or dependent variable entered was principal self-efficacy for instructional leadership and the independent variables included the three dimensions of district climate.

Based on the descriptive data, the mean score for PSE for Instructional Leadership was 7.39 (*SD*=.767), an increase of .55 points from the mean score for PSE for Managerial Leadership. The mean DCI for Superintendent Leadership was 3.98 (*SD*=.858), the mean DCI for Enabling Structures was 3.95 (*SD*=.666), and the mean DCI for Teamwork for Student Success was 4.18 (*SD*=.624) (Table 12).

Table 12

DCI and PSE for Instructional Leadership Means and Standards Deviations (N = 42)

Variables	M	SD
PSE Instructional Leadership	7.39	.767
DCI for Superintendent Leadership	3.98	.858
DCI for Enabling School Structures	3.95	.666
DCI for Teamwork for Student Success	4.18	.624

The results of the Pearson's correlation showed that between the superintendent leadership dimension of district climate and the instructional aspects of leadership efficacy, there was a medium positive correlation between the two variables, $r = .434$, $N = 42$, and the relationship was significant ($p = .002$). The threshold for determining statistical significance is based on the p-value being less than .05. The null hypotheses was rejected as the relationship

between PSE for Instructional Leadership and DCI for Superintendent Leadership did not happen by chance alone and that the DCI for Superintendent Leadership is a significant predictor for the instructional leadership dimension of principal self-efficacy. Based on the *p* value alone, there is evidence to suggest that DCI for Superintendent Leadership is a unique and statistically contributor to PSE for Instructional Leadership.

The results of the Pearson's correlation showed that between the enabling structures dimension of district climate and the instructional aspects of leadership, there was a medium positive correlation between the two variables $r = .503$, $N = 42$, and the relationship was highly significant ($p < .001$). The null hypotheses was rejected as the relationship between DCI for Enabling Structures and PSE for Instructional Leadership did not happen by chance alone and that DCI for Enabling Structures is a highly significant predictor for the instructional leadership dimension of principal self-efficacy. Based on the *p* value alone, there is evidence to suggest that the DCI for Enabling Structures has a uniquely high statistical significance when correlated to PSE for Instructional Leadership.

The results of the Pearson's correlation showed that between the teamwork for student success dimension of district climate and the instructional aspects of leadership, there was a medium positive correlation between the two variables $r = .466$, $N = 42$, and the relationship was significant ($p = .001$). The null hypothesis was rejected as the relationship between DCI for Teamwork for Student Success and PSE for Instructional Leadership did not happen by chance alone and that DCI for teamwork for student success is a significant predictor for the instructional leadership dimension of principal self-efficacy. Based on the *p* value alone, there is evidence to suggest that the DCI for Teamwork for Student Success is uniquely statistically significant when correlated to PSE for Instructional Leadership.

Of the three components of district climate, Enabling Structures proved to be the strongest predictor ($p < .001$) of principals' efficacy for instructional leadership, followed by DCI for Teamwork for Student Success ($p = .001$). The DCI for Superintendent Leadership presented to be correlated the least ($p = .002$), although still a significant contributor of PSE for Instructional Leadership.

The regression model proved to be statistically significant ($F(3,38) = 4.824$, $p = .006$, with 27% of the variance ($R^2 = .276$) in PSE for Instructional Leadership explained by district climate (Table 13). However, no dimension of DCI offered any significant amount of unique variance in explaining the dependent variable, PSE for Instructional Leadership, as shown in the coefficient analysis table.

Consequently, for every point increase in the superintendent dimension of district climate, principals' self-efficacy for instructional leadership increased by .065 of a point; for every point increase in the enabling structure dimension of district climate, principals' self-efficacy for instructional leadership increased by .356 of a point; and for every point increase in the teamwork for student success dimension of district climate, principals' self-efficacy for instructional leadership increased by .233 of a point (Table 14).

Table 13

DCI and PSE for Instructional Leadership Regression Analysis (N=42)

	R	R^2	SD	F	Sig.
Model 1*	.525	.276	.767	4.824	.006

* PSE Instructional Leadership
**Total DCI ($p < .05$)

Table 14

DCI and PSE for Instructional Leadership Coefficient Analysis Summary (N=42)

	β	*SE B*	*t*	*p**
DCI _SL**	.065	.195	.336	.739
DCI_ES**	.356	.269	1.323	.194
DCI_TSS**	.233	.260	.897	.376

* (p <.05); ** DCI Superintendent Leadership, DCI Enabling Structures, DCI Teamwork for Student Success

Research Question 3: PSE for Moral Leadership and DCI Correlation Analysis

The third research question sought to answer to what extent the dimensions of district climate correlate to principals' sense of efficacy with regard to the moral aspects of leadership (PSE for Moral Leadership). To determine the predictive value of the dimensions of DCI on PSE for Moral Leadership, a multiple regression and a Pearson's correlation was calculated and analyzed. In answering the fourth research question, the predictor variable, or dependent variable entered was principal self-efficacy for moral leadership and the independent variables included the three dimensions of district climate.

Table 15

DCI and PSE for Moral Leadership Means and Standard Deviations (N = 42)
Means and Standards Deviations Study Variables (N = 42)

Variables	M	SD
PSE Moral Leadership	7.42	.899
DCI for Superintendent Leadership	3.98	.858
DCI for Enabling School Structures	3.95	.666
DCI for Teamwork for Student Success	4.18	.624

The results of the Pearson's correlation showed that between the superintendent leadership dimension of district climate and the moral aspects of leadership, there was a small positive correlation between the two variables, r= .228, N= 42, and the relationship was not significant (p= *.074*). The threshold for determining statistical significance is based on the p-

value being less than .05. The researcher failed to reject the null hypotheses as there is not enough evidence to suggest that there is a relationship between PSE for Moral Leadership and the DCI for Superintendent Leadership and the DCI for Superintendent Leadership has no predictive value on principals' efficacy levels with regard to moral leadership. Based on the *p* value alone, the district leadership dimension of district climate is not a statistically unique contributor to PSE for Moral Leadership.

The results of the Pearson's correlation showed that between the Enabling Structures dimension of district climate and the moral aspects of leadership, there was a medium positive correlation between the two variables $r = .325$, $N = 42$, and the relationship was significant ($p = .018$). The null hypotheses was rejected as the relationship between DCI for Enabling Structures and PSE for Moral Leadership did not happen by chance alone and that DCI for Enabling Structures is a significant predictor for the moral leadership dimension of principal self-efficacy. Based on the *p* value alone, there is evidence to suggest that the DCI for Enabling Structures has a unique statistical significance when correlated to PSE for Moral Leadership.

The results of the Pearson's correlation showed that between the Teamwork for Student Success dimension of district climate and the moral aspects of leadership, there was a medium positive correlation between the two variables $r = .397$, $N = 42$, and the relationship was significant ($p = .005$). The null hypotheses was rejected as the relationship between DCI for Teamwork for Student Success and PSE for Moral Leadership did not happen by chance alone and that DCI for Teamwork for Student Success is a significant predictor for the moral leadership dimension of principal self-efficacy. Based on the *p* value alone, there is evidence to suggest that the DCI for Teamwork for Student Success has a unique statistical significance when correlated to PSE for Moral Leadership.

Of the three components of district climate, Teamwork for Student Success (p = .005) proved to be the stronger predictor of PSE for Moral Leadership, followed by Enabling Structures (p = .018). The DCI for Superintendent Leadership (p=. 074) was not a significant predictor of PSE for Moral Leadership. The regression model was not statistically significant, (F (3,38) = 2.586, p= .067, R=.412 and R^2=.170, which means that 17% of the variance in the PSE for Moral Leadership is explained by the Teamwork for Student Success dimension of district climate.

Consequently, for every point increase in the superintendent dimension of district climate, principal's self-efficacy for moral leadership decreased by .159 of a point; for every point increase in the enabling structure dimension of district climate, principals' self-efficacy for moral leadership increased by .212 of a point; and for every point increase in the teamwork for student success dimension of district climate, principals' self-efficacy for moral leadership increased by .555 of a point (Table 16). This analysis confirms linear regression reporting that the Teamwork for Student Success has the strongest correlation with a dimension of principal self-efficacy, that is PSE for Moral Leadership, r = .479, p = .018, N = 42.

Table 16

DCI and PSE for Moral Leadership Regression Analysis (N=42)

	R	R^2	SD	F	Sig.
Model 1*	.412	.170	.851	2.586	.067

* PSE Moral Leadership
**Total DCI (p <.05)

Table 17

DCI and PSE for Moral Leadership Coefficient Analysis (N=42)

	β	*SE B*	*t*	*p**
DCI _SL**	-.159	-.152	-.653	.518
DCI_ES**	.212	.157	.627	.535
DCI_TSS**	.555	.386	1.707	.097

* (p <.05); ** DCI Superintendent Leadership, DCI Enabling Structures, DCI Teamwork for Student Success

Research Question 4: Which Dimension of District Climate has the Strongest Association with PSE

The fourth research question sought to answer which dimension of district climate has the strongest association with total principal self-efficacy when holding demographic variables constant. To answer this question, three multiple regressions were calculated and analyzed to identify how much of the variation in total principal self-efficacy could be explained by the three dimensions of district climate.

In the first multiple regression, the dependent variable entered was DCI for Superintendent Leadership and the independent variable was the total PSE. Results of a multiple linear regression indicated that there was a significant relationship between the superintendent leadership dimension of district climate and the three dimensions of principals' total self-efficacy, (F (3,38) = 3.601, p =.022. R= .470 and R^2= .221, which means that 22.1% of the variance in the superintendent leadership dimension of district climate can be explained with the three dimensions of principals' total self-efficacy.

In the second multiple regression, the dependent variable entered was DCI for Enabling Structures and the independent variable was the total PSE. Results of a multiple linear regression indicated that there was a significant relationship between the enabling structures dimension of district climate and the three dimensions of principals' total self-efficacy, F (3,38)

= 5.043 p =.005. R= .534 and R^2= .285, which means that 28.5% of the variance in the superintendent leadership dimension of district climate can be explained with the three dimensions of principals' total self-efficacy.

Of the three subcategories of DCI, the third multiple regression, DCI for Teamwork for Student Success, shared the strongest correlation with the three dimensions of PSE (F (3,38) = 5.210 p =.004. R= .540 and R^2= .291, which means that 29.1% of the variance in the teamwork for student success dimension of district climate can be explained with the three dimensions of principals' total self-efficacy (Table 18).

Table 18

Total DCI and Total PSE Regression Model (N=42)

DV	IV	R	R^2	B	F	Sig.
DCI_SL*	PSE	.470	.221	.216	3.601	.022****
DCI ES**	PSE	.534	.285	.440	5.043	.005****
DCI_TSS***	PSE	.540	.291	.783	5.210	.004****

* DCI Superintendent Leadership
**DCI Enabling Structures
***DCI Teamwork for Student Success
****(p <.05)

Conclusion

The purpose of this study was to examine the relationship between district climate and principal self-efficacy. The statistical analysis confirms and supports the presence of a statistically significant correlation between the three dimensions of district climate and principal self-efficacy *r = 6.05, p = .020*. Each research question sought to examine the relationship between each dimension of district climate and its correlation to each of the subcomponents of principal self-efficacy. The results of the research questions are presented as follows:

The superintendent leadership dimension of district climate showed the strongest

significance with PSE for Instructional Leadership with a medium to positive correlation, r = .22, p = .002. The superintendent leadership domain of district climate was also significantly correlated to PSE for Managerial Leadership, r = .306, p = .024. The superintendent leadership dimension of district climate had no statistical significance with PSE for Moral Leadership, re = .228, p = .074.

The enabling structures dimension of district climate was statistically significant with all three dimensions of principal self-efficacy, but was highly significant with PSE for Instructional Leadership, r = .503, p < .001. The enabling structures dimension of district climate was also a strong medium positive predictor for principal self-efficacy for managerial leadership, r = .384, p = .006. The enabling structures dimension of district climate shared a smaller but significant medium positive correlation to PSE for Moral Leadership r = .325, p = .018.

The teamwork for student success dimension of district climate was strongly correlated with principal self-efficacy for management, r = .472, p = .001 and the instructional aspects of leadership efficacy, r = .466, p = .001. The teamwork for student success dimension of district climate shared a smaller but still significant medium positive correlation with the moral aspects of principal leadership efficacy, r = .397, p = .005.

Of the three dimensions of district climate, Teamwork for Student Success presented to have the strongest correlation relative to principal self-efficacy with regard to the managerial and instructional aspects of leadership efficacy.

Chapter V

Summary, Implications, and Recommendations

No Child Left Behind (*NCLB*, 2002), reauthorized in 2015 as *Every Student Succeeds Act (ESSA)*, shifted the educational landscape, increasing systems of accountability as it relates to instructional practices, standards-based reform, and high-stakes testing. This in turn has impacted the role of principals in their efforts to meet policy reform aimed at school improvement. The research shows that increased principal turnover has been attributed to increased demands placed on school leaders to meet measures relative to school and district accountability. As such, schools under state accountability sanctions lose principals at a rate higher than well-performing school districts, consequently impacting student performance as a result of the revolving door of school leaders. Schmidt-Davis and Bottoms (2011) asserted that a "principal can impact the lives of anywhere from a few hundred to a few thousand students during a year" (p.2). This echoes the importance of the role of a principal and the need for school districts to support and retain school leaders. The organizational context in which principals lead must support principals' sense of efficacy to effectively lead schools given the challenges and expectations placed on them to succeed.

This quantitative correlational study sought to understand to what extent the dimensions of district climate, superintendent leadership, enabling school structures, and teamwork for student success as identified by DiPaola and Smith (2008) influence principal self-efficacy (Tschannen-Moran and Gareis, 2004) as it relates to their ability to lead from a managerial, instructional, and moral perspective. A sample of 42 public school principals in Essex County, New Jersey completed a combined demographic survey, PSES, and DCI.

The survey was launched in April of 2020 at the onset of the COVID-19 pandemic. As

such, the response rate was low, as schools throughout the state of New Jersey and the country closed their doors and initiated virtual learning.

The data obtained, though, is consistent with the research on the relationship between district climate and district-level policies associated with education change and principal efficacy levels. It is plausible that because of the pandemic, administrative teams, the superintendent, and school principals increased their collaboration as they engaged in discourse pertaining to instructional platforms, expectations of teachers, students, and changes to the curriculum relative to pacing. As such, perhaps for the first time, some principals may have had increased communication with various school leaders and departments that they traditionally did not have. This would have contributed to principals reporting high levels of self-efficacy as their perceptions of their ability to perform the tasks and responsibilities of their jobs changed.

During school closures because of the pandemic, there was an increased focus on socioemotional learning, not only of students, but of teachers and principals as well as people began to engage in discourse on the physical and emotional wellbeing of others.

Additionally, the workload of principals changed with some months a major decrease in the responsibilities of principals to others with an uptick in the workload. Further, the number of meetings increased and with whom principals participated in these meetings.

Principal demographic information was collected, gathering information on length of service as a school principal and participation in a principal preparation program other than that required for state licensing, school level, size, and district type. The demographic data consisting of professional and school characteristics was not correlated with PSE or DCI; however, the research reports that there is no correlation on principal characteristics on principals' levels of self-efficacy.

In this study, principal self-efficacy as measured by the PSES (Tschannen-Morand and Gareis, 2004) was correlated with district climate employing DiPaola & Smith's (2008) District Climate Index (DCI), which measures how school districts operationalize themselves to support school improvement reform considering three dimensions: integrated superintendent leadership, enabling district structures, and teamwork for student success (p. 4).

Strong school leadership has been identified as critical to school effectiveness because of the pivotal role principals serve in impacting student learning, developing teachers, communicating a school vision, and oversight of school improvement efforts. However, district climate was a new construct with little supporting research. Earlier studies of district climate investigated the relationships between district climate, school climate, and student achievement; however, the connection to principal self-efficacy warranted a deeper look. Leithwood, et al. (2004) presented a body of research accounting for the role district organizational contexts such as geographic location, student population, accountability-oriented policy contexts, and superintendent leadership serve as critical indicators for successful school leadership. The emerging research has provided a body of knowledge on how district level policies and practices are associated with principal and school effectiveness. As such, this study provides a unique perspective as it extends the research linking school climate to school improvement and student achievement.

The theoretical framework for this study was grounded in Bandura's Social Cognitive Theory of Self-Efficacy and illustrated by Tschannen-Moran and Gareis' (2004) construct of principal self-efficacy. Social Cognitive Theory defines self-efficacy as "… peoples' judgments of their capabilities to organize and execute courses of action required to attain designated types of performance" (Bandura, 1986, p. 391). The theory behind self-efficacy is that a person's

cognitions, emotions, and behavior about their ability to be successful at a given task are affected by vicarious experiences, mastery experiences, social persuasions, and emotional states (1977). These influences affect one's judgment primarily from external or environmental stimuli or in this case, district climate.

District climate is defined by DiPaola and Smith (2008) as the collective efforts by all individuals within their organization who foster actions to help the organization effectively reach its goals (p. 1). District climate had its early origin in school climate research. School climate was considered by Anderson (1982) as the "stepchild of both organizational climate research and school effects research" (p. 368). Halpin and Croft (1963) used the analogy of "personality is to the individual what climate is to the organization" (p. 1). They argued that climate influenced all aspects of the organization by affecting performance and attitudes determined by the collective perceptions of the members and the common organizational practices that provide functionality to the organization. Organizational climate referred to the inherent characteristics of an organization that differentiate it from other organizations and those characteristics that impact the behavior of the organization (Hoy, Hannum, & Tschannen-Moran, 1998; Hoy & Tarter, 1992; Tschannen-Moran, Parish, & DiPaola, 2006).

To explore the relationship between school district climate and principal self-efficacy, the following research questions were used to guide this study:

Research Question 1: To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the managerial aspects of leadership (Managerial PSE)?

Research Question 2: To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the instructional aspects of leadership (Instructional PSE)?

Research Question 3: To what extent do the dimensions of district climate correlate to principals' sense of efficacy with regard to the moral aspects of leadership (Moral PSE)?

Research Question 4: Which dimension of district climate has the strongest association with the three dimensions of principals' total self-efficacy (management, instructional leadership ,and moral leadership) (Total PSE) when controlling for demographics?

Collected data were analyzed using correlational, multiple regression analyses. Findings relative to the relationship of all the dimensions of district climate (Total, Superintendent Leadership, Enabling School Structures, and Teamwork for Student Success) to all measures of PSE (Total, Managerial, Instructional, and Moral) are summarized in the next section of this chapter.

Summary of Findings

PSE and DCI mean scores. Descriptive analyses of the levels of principal self-efficacy, district climate, and the characteristics of principals relative to their school level, years serving as a principal, school demographics, and professional characteristics was provided. Frequency and mean scores were reported. The mean score for principals' total self-efficacy was highest relative to PSE for Moral Leadership and the lowest efficacy levels were reported for PSE for Managerial Leadership. PSE for Instructional Leadership was the second highest level of efficacy reported by principals. This data suggests that principals feel most efficacious in directing school cultures that address the social emotional needs of students and cultivating collective teacher efficacy beliefs on enhancing student achievement.

Principals reported on their district as being enabling or coercive with mean scores for DCI being the highest in the dimension of Teamwork for Student Success, followed by Superintendent Leadership. The Enabling Structures dimension of district climate was reported as being the least evidenced in participants' respective districts. This data suggests that principals thrive in school districts that promote collaboration among all stakeholders.

Research Question 1: DCI and PSE for Managerial Leadership. The first research question sought to answer to what extent the dimensions of district climate correlate to principals' sense of efficacy with regard to PSE for Managerial Leadership.

The PSES surveyed principals' ability to oversee the managerial aspects of the principalship such as prioritizing competing demands, maintaining control of their own schedule, and handling the paperwork, stress, and time demands of the job, thus removing them from focusing on instructional leadership. The regression analyses revealed that the Teamwork for Student Success dimension of district climate showed a uniquely statistically significant positive correlation with PSE for Managerial Leadership. Total district climate accounted for 22.9% of the variance in PSE for Managerial Leadership.

Perhaps one of the most important features of Managerial PSE is a principal's belief that they can "shape the operational policies and procedures that are necessary to manage [their] school" (Tschannen-Moran, 2004). The emergent literature speaks to learning organizations as professional learning communities where all stakeholders understand their role in meeting the goals of the organization. Leithwood, Lous, Anderson, and Walshrom (2011), however, caution that organizations as professional learning communities must be structurally malleable to effectuate school improvement agendas (p. 25). The alignment of district structures supports

principals' work, therefore adding to leadership efficacy for managing the day-to-day operations of a school.

Research Question 2: DCI and PSE for Instructional Leadership. The second research question sought to answer to what extent the dimensions of district climate correlate to principals' self-efficacy for Instructional Leadership.

The PSES subscale for PSE for Instructional Leadership asked principals to report on their ability to effectuate student learning in their schools (Tschannen-Moran, 2004). The results of the correlation analyses revealed that the Enabling Structures dimension of district climate was the strongest predictor of principals' efficacy for Instructional Leadership. The regression model was statistically significant with 27% of the variance in Instructional Leadership was explained by the Enabling Structures dimension of district climate.

The findings report that principals feel the most efficacious in setting the instructional course when enabling structures permit them to do so. "This requires the alignment among goals, strategies, structures, and resources, so that the work of every staff member in the district supports system-wide goals focused on increasing student achievement" (Ikemoto, Taliaferro, and Fenton, 2014).

The findings of the analysis are not surprising as for principals to support the enactment of the curriculum, the district must ensure that structures and systems are in place for them to do so. This would entail principals having collaborative structures in place with content supervisors to discuss curriculum, the expectations for its delivery, and to support principals' understanding of the content should it not be their area of expertise. Oftentimes the structures for principals to support the curriculum is limited to their giving feedback on lesson plans and feedback to teachers from informal classroom observations or formal teacher evaluations.

There is a growing body of research supporting professional learning communities for school administrators such as teachers participation in professional learning communities. NAESP speaks to the development of learner-centered leaders who are continuously seeking ways to enhance their knowledge given the increased complexity and demands of the principalship. Enabling structures in a school district would create structures or collaborative teams allowing its district's leaders to share learning and knowledge across the schools, disciplines, and departments. Districts with enabling school structures would create venues where principals could engage in discourse about scheduling challenges, budgets, facilities, transportation, and human resources functions to instruction.

Henriskon (2019) noted that through the trust-building process, assignment of a critical friend and scheduled time and space to reflect, superintendents and principals reported on how this "contributed to new ways of talking and thinking and has enhanced the leaders' system thinking" (p. 1).

Leithwood et al. (2011) reported on expansive research conducted from Canada and the U.S. showed a positive correlation between "trust-based collaboration" among school districts and principals on the role of professional learning communities lending itself to "more focused instruction and better student achievements" (Leithwood et al., 2011, as cited in Henriksen and Aas, 2020).

It is these types of enabling structures that create learner-centered leadership that serve to support teamwork. Further, collaborative structures support principals' self-efficacy as they begin to feel a part of a team of leaders who are also seeking to improve their performance with a supportive network within the district.

Research Question 3: DCI and PSE for Moral Leadership. The third research question sought to answer to what extent the dimensions of district climate correlate to principals' self-efficacy for Moral Leadership.

The PSES for Moral Leadership asked principals to report on their ability promote ethical behavior among all stakeholders, promote acceptable behavior among students, promote school spirit, and promote the prevailing values of the school community.

The results of the correlation analyses showed that the Teamwork for Student Success dimension of district climate has the strongest significant relationship with PSE for Moral Leadership. The regression model, however, was not statistically significant with only 17% of the variance in PSE for Moral Leadership explained by district climate.

The Teamwork for Student Success dimension of district climate speaks to the focus on teaching and learning. Teamwork for Student Success suggested that there is a crucial focus on teaching and learning, creating an environment of trust, steeped in collegiality, respect, and a dedication to the success of all students.

Cooperation and collaboration among supervisors, principals, teachers, and central office administrators serves to support the district's organizational performance. Principals who can count on the support of higher level administrators on the decisions they make serve to increase principal efficacy levels. Principals reporting to have greater influence on shaping ethical behavior, promoting school spirit, and holding staff, students, and parents accountable to the vision and mission of the school and managing student behavior believe these tasks to be separate from district mandated tasks or responsibilities. There is a greater sense of autonomy in creating the culture of the school, while recognizing the support available to them from colleagues.

Research Question 4: Total DCI and PSE

The fourth research question sought to answer which dimension of district climate had the strongest association on principals' total self-efficacy. Three multiple regression analyses were calculated and analyzed to identify how much variance in total principal self-efficacy could be explained by the three dimensions of district climate.

Of the three dimensions of district climate, Teamwork for Student Success showed the strongest correlation and explained 29% of the variance in principals' total self-efficacy. These findings are aligned to DiPaola and Smith (2008) who posited that Teamwork for Student Success serves to cultivate shared organizational beliefs, which in turn spurs collective or uniform action by the members of an organization (Forsyth, Adams and Hoy, 2011). Teamwork for Student Success is also referred to as collective trust. Forsyth, et al. (2011) referred to trust as the "keystone of successful interpersonal relations, leadership, teamwork, and effective organizations" (p. 3). School districts that promote open systems in their social structures and promote collaboration among their leadership teams contribute to principals' sense of efficacy to manage the organization successfully. Teamwork for Student Success requires school districts to foster environments of collegial respect, support, cooperation among levels of administration, and a commitment in the urgency for improving student performance. The Hawthorne studies dating back to the 1930s confirms the aforementioned statement as the study reported that employees are most motivated and dedicated to reaching the goal of the organization when interpersonal relationships are strong. The Hawthorne studies revealed that employee motivation was greatly influenced by the interpersonal relationships at the workplace.

Hall and Hord (2015) reported school cultures were cultivated similarly to that of the corporate sector. They stated that when individuals were made to feel valued and integral in

meeting organizational objectives, the productivity of the organization increased. Hall and Hord (2015) recognized the importance of school leaders in addressing the culture of their schools as a means to shape and steer organizational effectiveness. Personal mastery, team learning, and building a shared vision were factors contributing to a culture that served to meet the goals of the organization (Louis, J. et al., 2015). While personal mastery, team learning, and building a shared vision were discussed as factors affecting culture at the school level, the identifiers are applicable to Bandura's sources of self-efficacy and DiPaola and Smith's (2008) dimensions of principal self-efficacy: integrated superintendent leadership, teamwork for student success, and enabling school structures.

Interestingly, the results of this study indicated a dynamic relationship between the three components of district climate and that they were highly correlated among each other; however, integrated superintendent leadership had a lower correlation to principals' sense of efficacy. It is possible that the impact or correlation between PSE and the integrated superintendent leadership dimension of district climate is moderated by the interplay between enabling school structures and teamwork for student success.

The natural structure of the district requires school leaders and its departments to rely on each other to accomplish the goals of the organization. While each department has an interrelated role, it is incumbent on the superintendent to clearly develop these structures while modeling the expectations for how these systems are to collaborate. The superintendent is responsible for developing supportive organizational arrangements, consulting, monitoring, and reinforcing the change process (Hinde, 2015). Subscribing to Hinde's purport, the impact of superintendent's leadership would appear to have a greater correlation on principal self-efficacy as all action and non-action that happens in a school district is guided by the action or non-action

of the superintendent. Qualitative research may provide more insight as to why the superintendent leadership domain of district climate had the weakest correlation.

The importance of relationship building and trust in professional relationships is present. Research in Norway supports the need for superintendents and principals to engage in dialogue meetings (Engeland, Langfeldt, and Roald 2008). In such structures, Engeland et al. (2008) report that principals and superintendents come to "appreciate cooperation through dialogue meetings; the superintendent acquires a better understanding of how the school works, and the principals receive support, feedback, and advice (p. 191).

Limitations, Delimitations, and Recommendations for Future Research

This study aimed to address the relationship of district climate on principal self-efficacy to lead successful schools amidst increased accountability for raising student achievement. The correlational results in the study indicated that there are specific relationships between district climate and principals' sense of efficacy, and the components of district climate (integrated superintendent leadership, enabling organizational structure, and teamwork for student success) and principals' sense of efficacy for instructional, moral, and managerial leadership.

There were several limitations to this study. As such, a future study could provide confirmatory evidence using the manipulation of variables presented in this study to establish cause and effect.

The first limitation of this study is that district climate is still a relatively new construct that calls for more exploration. The research on district climate has been limited to its impact on teacher performance and student achievement, void of research on district climates' influence on principal efficacy. Leithwood et al. (2012) document scarcity of research on the extent to which school districts affect principals' sense of efficacy.

The second limitation is that because of the COVID-19 pandemic, the response rate was low. The study was limited to principals within a specific geographic location at a specific period in time, thus the generalization of the results to other regions and conditions should be explored. A further, a longitudinal data collection process would serve to examine principal perspectives over a period of time. Continuing this research with this same participant pool would be worthwhile in identifying how principals' reporting of their efficacy was influenced by the pandemic relative to their ability to assist in directing school closures and the transition to remote learning. A larger participant pool may serve to address nonresponse bias. Nonresponse bias impacts both the reliability and validity of survey study findings (Fowler, 2009; Tabachnick & Fidell, 2007).

The third limitation is that this study was limited to principals and did not consider the perspectives of assistant principals or district-level leaders. Future studies may wish to explore the perspectives of these stakeholder groups in an effort to identify structures that lead to or hinder high levels of principal self-efficacy in the form of qualitative research.

The fourth limitation of this study is that the demographic and professional characteristics of the participant pool were not correlated with their efficacy levels. According to Leithwood et al. (2012), "few demographic variables have been shown to have a significant influence on leader efficacy" (p. 111). However, because of the differences in district size, variances in the organizational structure of central offices, it is possible that further investigation is warranted.

Implications for Policy and Practice

The presented research is clear on the role of the school district's relationship in impacting principals' efficacy to lead successful schools. The need for school districts to extend their support and structures beyond the traditional top-down approach is documented (Schmidt-

Davis and Bottoms, 2010; Bottoms and Fry, 2009; Hoy and Sweetland, 2000; Cushing et al., 2003; De Leon, 2006; Ikemoto, Taliaferro, and Fento, 2014; Togneri and Anderson, 2003; Tschannen-Moran and Gareis, 2004; Leithwood and Jantzi, 2008).

Bottoms and Fry's 2009 SREB report on the constant research findings about school district effectiveness is that "Districts must maintain a strong focus on improving instruction and raising standards and achievement by supporting principals to become instructional leaders" (p. iv). School districts must find ways to operationalize themselves to remove principals from having to complete the mundane tasks associated with their role such as administrative paperwork. Alvoid and Black, Jr. report in the *Changing Role of the Principal* (2014) that principals feel unprepared for the role and find most of their time spent "being compliant, enforcing compliance from others, and managing conflict" (p. 2). School districts must examine central office structure so that it is organized in a manner that supports principals' autonomy for "school ownership of the learning process" (Alvoid and Black, Jr., 2014, p. iv).

The research is consistent in acknowledging factors that have contributed to the changing role of the principal such as changes in demographics, budgetary cuts, increased hours, and reporting, increased accountability standards and politics (De Leon, 2006; Glass & Franceschini, 2007; Bottoms & O'Neill, 2001; Combs, Edmonson, & Jackson, 2009; Queen & Queen, 2005).

Teamwork for Student Success dimension of district climate showed to have the greatest influence on principals' sense of leadership efficacy. As such, school districts must seek to emphasize teamwork and professional learning communities. DiPaola and Smith (2008) posit that "open district climates that foster trust, facilitate problem solving, enable cooperation, and encourage innovation is the essence of Teamwork for Student Success, in which a shared vision for meeting organizational objectives requires collaboration and synchronization of departments

and social capital to meet district goals" (p. 2). Leithwood and Janzi (2008) report on the leader efficacy being positively impacted by school districts organized as a collective unit, emphasizing teamwork and professional communities built in trust, all of which positively impact student outcomes. Tschannen and Moran (2004) report on the role of the superintendent in forging partnerships among district staff and school administrators. Leithwood and Jantzi (2008) report the importance of district leadership in creating structures that serve to support working conditions rather than directional or coercive structures. The superintendent must create the conditions for district staff to support principals rather than thwart their efforts through bureaucratic practices.

The Enabling Structures dimension of district climate proved to have a significant influence on principals' sense of efficacy. District leadership must shift from one of oversight to providing capacity-building support, giving principals the autonomy to lead in a manner that addresses the specific needs of their school (Bottoms and Fry, 2009, p. v). A decentralization of central office structures is required providing principals with a voice in instructional direction and direction of school budgets. DiPaola and Smith (2008) posit that an enabling district structure provides for effective achievement of goals. Such structures have clear expectations, high achievement goals, necessary resources, accountability and monitoring processes, and clear and open communication networks" (p. 14). School districts seeking to be reflective of an enabling district structure must ensure that principals are provided with the resources and autonomy to acquire and develop staff to support instructional and enrollment needs, tools to simplify the analysis of data, and interventions to support at-risk students.

Integrated superintendent leadership proved to have the least significance on principals' sense of efficacy; however, the conditions for teamwork for student success and enabling

structures must be directed by school district leaders. This is aligned to Tschannen-Moran and Gareis' (2005) report that high levels of principal self-efficacy is attributed to principals' perceptions of the support they receive from central office and from the superintendent. At the same time, Dirks and Ferrin (2002) note that trust in the principal for improving school outcomes trumps that of the superintendent. Holding to Dirks and Ferrin's (2002) position, superintendents must have the belief in their principals' capacity to positively affect school improvement while providing the conditions for them to do so.

Superintendents should take an active role in exploring methods to reduce the amount of time spent on paperwork, emails, and other distractions that steal a principal's time away from working with students and being an instructional leader to the staff (Pijanowksi, Hewitt, and Brady, 2009).

In the Wallace Foundation's 2010 *Investigating the Links to Improved Student Learning,* leadership is defined "by referenc[ing] to two core functions. One function is providing direction; the other is exercising influence" (p. 11). District superintendents must strike a balance between the two, while considering the role of trust, collaboration, systems and structures when leading schools and their respective school leaders. Schools successful at leading school reform have been those with superior established processes and have removed bureaucratic coercive structures, building the capacity of principals to build upon and utilize the processes or organizational structures effectively to improve school performance. Superintendents must consider collective leadership as a means to support principal self-efficacy as it supports Bandura's Social Cognitive Theory that self-efficacy is groomed by social persuasion, vicarious learning experiences, and mastery experiences. Collective leadership provides opportunities for principals to engage and learn from their peers and the superintendent

and apply these skill sets into their daily practice. Distribution of leadership was found to be highly visible in high-performing schools as it permitted organizations to capitalize on the capabilities and strengths of their leadership teams while not compromising the direction of the district's objectives or their approach towards them (Louis et al., 2010, p. 35).

Mintzberg identifies a single team or person responsible for determining the success of an organization in a school district that accountability falls on the superintendent. As such a practical implication for addressing the low correlation of integrated superintendent leadership with principal self-efficacy as offered by the Wallace Foundation (2010) could be to:

1. Ensure they are visible and articulate clearly;
2. Offer opportunities for school leaders to engage in professional discourse in the form of principal academies, critical friends, or professional learning communities;
3. Extend collaborative professional learning opportunities to teachers and departments to ensure the instructional agenda is implemented as intended;
4. Provide aligned forms of leadership distribution that build on leaders' existing strengths.

Principals who are able to manage the competing demands of the job can maneuver conflicting roles, external influences stemming from community relations and politics; that is, those with higher levels of principal self-efficacy will utilize the district's resources and social capital to move beyond these stressors. Principals' perception of their district as being one of support will assist them in accomplishing challenging tasks and increase levels of self-efficacy. Districts that recognize their contribution to principals' self-efficacy create structures that permit principals to expend their efforts towards the improvement of instruction rather than a plethora of administrative tasks. Districts should examine their organizational culture and structure to ensure

it supports principals' ability to focus on teacher development, curriculum implementation, and student performance outcomes. From a national perspective, systems of accountability should be reframed to ensure school improvement efforts are based on continuous improvement rather than punishment in the form of school closures or reduced funding. When these systems are in place, principals are under less pressure to meet unattainable goals, adding to reduced turnover rates or abandonment of the profession altogether.

The most profound implication of this study was the realization that leadership is not positional, but rather a collective responsibility by superintendents, district leaders, school administrators, teachers, parents, and community leaders.

Conclusion

The role of the principal has become increasingly complex because of increased accountability, matters of equity under budget constraints, new teacher evaluation systems, and a plethora of challenges that students arrive with to the schoolhouse doors. The role of the principal has evolved to be more than a building manager to one of "an aspirational leader, a team builder, a coach, and an agent of visionary change" (Alvoid and Black, Jr., 2004, p. 1). Effective school leadership has been reported to be second to classroom instruction in improving student outcomes. As such, it is incumbent upon school districts to support school principals. Self-efficacy has been touted to serve as a viable construct in looking at what and why principals are able to address the myriad challenges associated with the role. However, the research on the antecedents to principal self-efficacy is still limited. There is a body of research surfacing that explores the role of the school district in supporting principal efficacy levels.

This study sought to examine which of the three dimensions of district climate—integrated superintendent leadership, enabling district structures, or teamwork for student success

(DiPaola and Smith, 2008)—has the strongest association in supporting principal efficacy to lead from a managerial, instructional, and moral perspective (Tschannen-Moran and Gareis, 2004).

The results of this study confirm that district climate has a statistically significant correlation to principal efficacy levels. The data obtained from this study support existing research on the need for school districts to organize themselves in a manner that supports principals' capacity to lead school improvement. Beyond the onus of school districts in supporting principals' efficacy levels, the Wallace Foundation's 2010 SREB report calls on state departments of education to support school districts in developing their principals and teachers in their collective efforts to improve student performance levels. The research on the role of the principal under federal accountability remarks on the importance of redesigning the principalship so that it is achievable, void of the "job-related stress" present in the current design of the job (Boyland, 2011, p. 1).

The data from this study revealed that the Teamwork for Student Success dimension of district climate has the strongest correlation with principal self-efficacy. Considering these findings, school districts, more specifically the superintendent, should ensure a district climate that serves to create a "culture of collective responsibility, balanced autonomy, and continuous learning and improvement that allows central office and school leaders to work collaboratively towards goals (Ikemoto, et al., 2014, p. 6). School districts evidenced of this type of shared responsibility for student success support trusting relationships where principals are not afraid to discuss the needs of their school without appearing ineffective or not possessing the capacity to lead change. Principals thrive in this type of environment, and in turn, higher levels of self-efficacy are achieved.

References

Abbott, A. (1988). The system of the professions: An essay on the division of expert labor. Chicago: University of Chicago Press. Beck, L., & Murphy, J. (1993). Understanding the principalship: Metaphorical themes, 1920s–1990s. New York: Teachers College Press.

Aikens, N. L. & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology*, 100, 235–251.

Allensworth, E.M. & Hart, H. (2018). How do principals influence student achievement? Chicago, IL: University of Chicago Consortium on School Research.

Alvoid, L. & Black, Jr. W.L. (2014), *The Changing Role of the Principal: How High-Achieving Schools are Recalibrating School Leadership.* WADC: Center for American Progress.

American Institutes for Research. (2010). What experience from the field tells us about school leadership and turnaround. Retrieved from www.learningpt.org/pdfs/leadership_turnaround_schools.pdf

Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.

Bandura, A. (1977b). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122–147.

Bandura, A. (1997). Self-efficacy: The exercise of control: W.H. Freeman and Company.

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), Annals of child development. Vol. 6. Six theories of child development (pp. 1–60). Greenwich, CT: JAI Press.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*.

Englewood Cliffs, NJ: Prentice-Hall.

Barshay, J. (2019, December). What 2018 PISA international rankings tell us about U.S. schools. *The Hechinger Report.* https://hechingerreport.org/u-s-education-achievement-slides-backwards/

Blount, J. (1998). *Destined to rule the schools: Women and the superintendency*, 1873–1995. Albany, NY: SUNY Press.

Bossert, S., Dwyer, D., Rowan, B., & Lee, G. (1982, summer). "The Instructional Management Role of the Principal." *Education Administration Quarterly,* 18(3), 34–63.

Bottoms, G. & Fry, B. (2009). The district leadership challenge: Empowering principals to improve teaching and learning. Retrieved from Wallace Foundation website: www.wallace foundation.org /knowledge-center/school-leadership/district-policy-and-practice /Documents/District-Leadership-Challenge-Empowering-Principals .pdf

Bottoms, G. & Schmidt-Davis, J. (2010). The three essentials: Improving schools requires district vision, district and state support, and principal leadership. Retrieved from Southern Regional Education Board website: http://publications.sreb.org/2010/10V16 _Three_Essentials.pdf

Boyland, L. (2011). Job stress and coping strategies of elementary principals: A statewide study. *Current Issues in Education*, 14(3), 1–11.

Bradley, K. & Levin, S. (2019, June 5). Understanding and addressing principal turnover | School of Thought [Web log post]. Retrieved from http://blog.nassp.org/2019/06/05/understanding-and-addressing-principal-turnover/

Branch, G., Hanushek, E., & Rivkin, S. (2009). Estimating Principal Effectiveness. Working Paper 32. National Center for Analysis of Longitudinal Data in Education Research.

Brock, B. L. & Grady, M. L. (2002). *Avoiding burnout: A principal's guide to keeping the fire alive*. Thousand Oaks, CA: Corwin Press.

Brubaker, D. (1995). How the principalship has changed: Lessons from principals' life stories. NASSP Bulletin, 79, 88–95. Center on Reinventing Public Education. (2005). When learning counts: Rethinking licenses for school leaders. Seattle, WA: Author.

Brown, K. (2005). Pivotal points: History, development, and promise of the principalship. In F. W. English (Ed.), *Sage Handbook of Educational Leadership* (pp. 109–141). Thousand Oaks, CA: Sage.

Buckingham, J., Wheldall, K., & Beaman-Wheldall, R. (2013). Why poor children are more likely to become poor readers: The school years. *Australian Journal of Education*, *57,* 190-213.

Burkhauser, S., Gates, S. M., Hamilton, L. S., & Ikemoto, G. S. (2012). First-year principals in urban school districts: How actions and working conditions relate to outcomes (Technical Report). Santa Monica, CA: RAND Corporation.

Carr, A. (1994). Anxiety and depression among school principals: Warning, the principalship be hazardous to your health. *Journal of Educational Administration*, 32(3), 18–34.

Cherniss, C. (1993). Role of professional self-efficacy in the etiology and amelioration of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), Professional burnout: Recent developments in theory and research (pp. 135–143). Washington, DC: Taylor & Francis.

Cook-Harvey, C.M., Darling-Hammond, L., Lam, L., Mercer, C., & Roc, M. (2016). Equity and ESSA: Leveraging Educational Opportunity Through the Every Student Succeeds Act. Palo Alto, CA: Learning Policy Institute.

Cuban, L. (1988). The managerial imperative and the practice of leadership in schools. Albany, NY: SUNY Press.

Cubberly, E. P. (1934). Public education in the United States: A study and interpretation of American educational history. Boston: Houghton Mifflin.

Cutler, W., III. (2000). Parents and schools: The 150-year struggle for control in American education. Chicago: University of Chicago Press. Administration viewed through its textbooks. Lanham, MD: Scarecrow.

Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational Research Review*, 27, 110–125. https://doi.org/10.1016/j.edurev.2019.02.003

Darling-Hammond, L., LaPointe, M., Meyerson, D., & Orr, M. T. (2007). Preparing school leaders for a changing world: Lessons from exemplary leadership development programs. Datnow, A., Hubbard, L., & Mehan, H. (2002). *Extending educational reform: From one school to many.* London: Routledge Falmer.

Dimmock, C. & Hattie, J. (1996). School principals' self-efficacy and its measurement in a context of restructuring. School Effectiveness and School Improvement, 7, 62–75.

Dougherty, J. (2004). More than one struggle: The evolution of black school reform in Milwaukee. Chapel Hill: University of North Carolina Press.

DuFour, R. & Mattos, M. (April 2013). How do principals really improve schools. *Educational Leadership*, v*70* n7, 34–40.

Elementary and Secondary Education Act of 1965. 20 U.S.C. § 2891

Every Student Succeeds Act of 2015. 20 U.S.C.A. § 6301

Federici, R.A. Principals' self-efficacy: relations with job autonomy, job satisfaction, and

contextual constraints. *Eur J Psychol Educ* 28, 73–86 (2013). https://doi.org/10.1007/s10212-011-0102-5

Field, A.P. (2009). *Discovering statistics using SPSS: (and sex drugs and rock n' roll):* SAGE Publishing.

Fisher, Yael. (2020). Self-efficacy of School Principals. DOI: 10.1093/acrefore/9780190264093.013.910

Fink, E. and Resnick, L. B. (2001) Developing principals as instructional leaders. Phi Delta Kappan, 82, 598–606

Fowler, F. J. (2009). Survey research methods. Los Angeles: SAGE.

Fullan, M., Bertani, A., & Quinn, J. (2004). Lessons from district-wide reform. Educational Leadership, 61(6), 42–46

Fullan, M., & Quinn, J. (2015). Coherence: The Right Drivers in Action for Schools, Districts, and Systems. Corwin & Ontario Principals' Council.

Glass, T., Mason, R., Eaton, W., Parker, J. C., & Carver, F. (2004). The history of educational administration viewed through its textbooks. Lanham, MD: Scarecrow.

Glasman N.S., Nevo D. (1988) The School Principalship. In: Evaluation in Decision Making. Evaluation in Education and Human Services Series, vol 19. Springer, Dordrecht.

Goodwin, R. H., Cunningham, M. L., & Eagle, T. (2005). The changing role of the secondary principal in the United States: An historical perspective. *Journal of Educational Administration and Policy* 37(1), 1–17. doi: 10.1080/002206204200033604.

Hallinger, P. (1992), "The Evolving Role of American Principals: From Managerial to Instructional to Transformational Leaders." *Journal of Educational Administration*, Vol. 30 No. 3. https://doi.org/10.1108/09578239210014306.

Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. Leadership and Policy in Schools, 4(3), 221–239. doi: 10.1080/15700760500244793

Hallinger, P., & Heck, R. H. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980–1995. *Educational Administration Quarterly*, 32(1), 5–44.

Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980–1995. *School Effectiveness and School Improvement*, 9(2), 157–191. doi: 10.1080/0924345980090203.

Hallinger, P. (2018). Bringing context out of the shadows of leadership. *Educational Management Administration & Leadership*, *46*(1), 5–24. https://doi.org/10.1177/1741143216670652

Hallinger, Philip & Huber, Stephan. (2012). School leadership that makes a difference: international perspectives. *School Effectiveness and School Improvement*. 23. 1–9. 10.1080/09243453.2012.681508.

Halpin, Andrew W., and Croft, Don B. 1963. The Organizational Climate of Schools. Chicago: Midwest Administration Center of the University of Chicago.

Hargreaves, A., & Fink, D. (2006). Redistributed Leadership for Sustainable Professional Learning Communities. *Journal of School Leadership*, *16*(5), 550–565. https://doi.org/10.1177/105268460601600507

Horng, E., Klasik, D., & Loeb, S. (2010). Principal's time use and school effectiveness. *American Journal of Education*, 116, 491–523. Retrieved from Stanford University website: http://cepa .stanford.edu/sites/default/files/Principal%27s%20Time%20Use%20

AJE.pdf

Honig, M., Copland, M., Rainey, L., Lorton, J., & Newton, M. (2010). Central office transformation for district-wide teaching and learning improvement. Seattle, WA: University of Washington, Center for Study of Teaching and Policy.

Hoy, W. & Sweetland, S. (2000). Bureaucracies that work: enabling not coercive. Unpublished manuscript, The Ohio State University. Retrieved March 27, 2008 from: http://www.coe.ohio-state.edu/whoy/EnablingBureaucracy.pdf.

Ikemoto, G. Taliaferro, L., Fenton, B., & Davis, J. (2014, June). Great principals at scale: Creating district conditions that enable all principals to be effective. Dallas: The Bush Institute; New York, NY: New Leaders. Retrieved from http://www.bushcenter.org/alliance-reform-education-leadership/great-principals-scale.

International Journal of Leadership, January – March 2009, V. 12 No 1, 73–84. The effects of school culture and climate on student achievement retrieved from https://www.tandfonline.com/doi/pdf/10.1080/13603120701576241

Imants, J.G. and De Bradbander, C.J. (1996), Teachers' and principals' sense of efficacy in elementary schools. Teaching and Teacher Education, Vol. 12 No. 2, pp. 179–95.

Jantzi, D. and Leithwood, K. (1996). Toward an Explanation of Variation in Teacher's Perceptions of Transformational School Leadership. *Education Administration Quarterly*. 32(4), 512–538.

Kafka, J. (2009). The principalship in historical perspective. *Peabody Journal of Education*, *84*(3), 318–330. *Learning Policy Institute*. (n.d.). Retrieved from https://learningpolicyinstitute.org/sites/default/files/product-files/NASSP_LPI_Principal_Turnover_Research_Review_REPORT

Krüger M., Scheerens J. (2012) Conceptual Perspectives on School Leadership. In: Scheerens J. (eds) School Leadership Effects Revisited. Springer Briefs in Education. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-2768-7_1.

Landy, K. E. (2013, January 1). *Enabling District Structure: The Relationship between Perceived District Structure and Principal Self-Efficacy. ProQuest LLC*. ProQuest LLC. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eric&AN=ED553122&site=eds-live

Leithwood K. (2007) What We Know About Educational Leadership. In: Burger J.M., Webber C.F., Klinck P. (eds) Intelligent Leadership. Studies in Educational Leadership, vol 6. Springer, Dordrecht.

Li, Danielle (2015). *School Accountability and Principal Mobility: How No Child Left Behind Affects the Allocation of School Leaders.* Harvard Business School. Working Paper 16-052. Available at https://pdfs.semanticscholar.org/295d.

Leithwood, K., Strauss, T.; and Anderson, S.E. (2007). District contributions to school leaders' sense of efficacy: a qualitative analysis. Journal of School Leadership, 17, 735–770.

Leithwood, K., and Menzies T. (1998). A review of research concerning the implementation of site-based management. School Effectiveness and School Improvement, 9(33), 233–285.

Leithwood, K. (1994). Leadership for school restructuring. Educational Administration Quarterly, 30(4), 498–518.

Leithwood, K.; Louis, S. K.; Anderson, S.; Wahlstrom, K. (2004). How Leadership Influences Student Learning. Wallace Foundation.

Leithwood, K. and Jantzi, D. (2008). Linking leadership to student learning: the contributions of

leader efficacy. *Educational Administration Quarterly*, 44(4), 496–528.

Leithwood, K. and Jantzi, D. (1996). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration*, 38(2).

Leithwood, K. and Jantzi, D. (1999). Transformational school leadership effects: a replication. School Effectiveness and School Improvement, 10(4), 451–479.

Leithwood, K. A., Begley, P. T. and Cousins, J. B. (1990). The nature, causes and consequences of principals' practices: an agenda for future research. *Journal of Educational Administration*, 28(1), 5–31.

Locke, E. A., Frederick, E., Lee, C., & Bobko, P. (1984). The effect of self-efficacy, goals, and task strategies on task performance. *Journal of Applied Psychology*, 69(2), 241–25.

Louis, K. S., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). Investigating the links to improved student learning: Final report of research findings. Retrieved from Wallace Foundation website: www.wallacefoundation.org/knowledge-center/schoolleadership/key-research/Documents/Investigating-the-Links-toImproved-Student-Learning.pdf.

Louis, K. S., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). Investigating the links to improved student learning: Final report of research findings Learning from Leadership Project. Minneapolis, MN: University of Minnesota.

Leithwood, Kenneth & Day, Christopher & Sammons, Pam & Harris, Alma & Hopkins, David. (2006). Successful School Leadership What It Is and How It Influences Pupil Learning.

Leithwood, K., Seashore Louis, K, Anderson, S. & Wahlstrom, K. (2004) How Leadership Influences Student Learning. Toronto, Ontario: Center for Applied Research and

Educational Improvement and Ontario Institute for Studies in Education.

Leithwood, K., (2013). Strong Districts and their Leadership. Toronto, Ontario: The Council of Ontario Directors of Education and The Institute for Education Leadership.

Levin, S. & Bradley, K. (2019). *Understanding and Addressing Principal Turnover: A Review of the Research*. Reston, VA: National Association of Secondary School Principals.

Louis, Karen & Dretzke, Beverly & Wahlstrom, Kyla. (2010). How does leadership affect student achievement? Results from a national US survey. School Effectiveness and School Improvement. 21. 315–336. 10.1080/09243453.2010.486586.

Louis, K. and Marks, H. (1998). Does professional community affect the classroom? American Journal of Education, 106, 532–596.

Louis, K. S., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). Investigating the links to improved student learning: Final report of research findings. Retrieved from Wallace Foundation website: www.wallacefoundation.org/knowledge-center/schoolleadership/key-research/Documents/Investigating-the-Links-toImproved-Student-Learning.pdf.

Manna, P. (2015). Developing Excellent School Principals to Advance Teaching and Learning: Considerations for State Policy. New York: The Wallace Foundation, 2015.

Marzano, R. J., Waters, T., & McNulty, B. (2005). School leadership that works: From research to results. Alexandria, VA: Association for Supervision and Curriculum Development.

McLaughlin, K. A., & Sheridan, M. A. (2016). Beyond cumulative risk: a dimensional approach to childhood adversity. *Current Directions in Psychological Science*, *25,* 239–245.

McCormick, M. J. (2001). Self-Efficacy and Leadership Effectiveness: Applying Social Cognitive Theory to Leadership. *Journal of Leadership & Organizational Studies*, 8, 22–

33. https://doi.org/10.1177/107179190100800102

Mujis, D. (2004). *Doing quantitative research in education with SPSS.* London: SAGE Publications Ltd.

Multiple Regression Analyses using SPSS Statistics. (2008). https://statistics.laerd.com/spss-tutorials/multiple-regression-using-spss-statistics.php.

National Policy Board for Educational Administration (2015). Professional Standards for Educational Leaders, 2015. Reston, VA: Author.

Pijanowski, J. C., Hewitt, P. M., & Brady, K. P. (2009). Superintendents' perceptions of the principal shortage. National Association of Secondary School Principals, NASSP Bulletin, 93(2), 85–95. doi: 10.1177/0192636509343963

Queen, J. A., & Queen, P. S. (2005). The frazzled principal's wellness plan. Thousand Oaks, CA: Sage Publications.

Rice, J. K. (2010). Principal effectiveness and leadership in an era of accountability: What research says. Retrieved from National Center for Analysis of Longitudinal Data in Educational Research (CALDER) website: www.caldercenter.org/upload/CALDER-Research-and-Policy-Brief-8.pdf.

Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types. *Educational Administration Quarterly*, *44*(5), 635–674. https://doi.org/10.1177/0013161X08321509

Rorrer, A., Skria, L., & Scheurich, J. (2008). Districts as institutional actors in educational reforms. *Educational Administration Quarterly*, 44, 307–358.

Spillane, J. & Thompson, C. (1997). Reconstructing conceptions of local capacity: The education agency's capacity for ambitious instructional reform. Educational Evaluation and Policy

Analysis, 19(2), 185–203.

Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics. Boston: Pearson Education, Inc.

Tschannen-Moran, M., & Gareis, C. R. (2004). Principals' sense of efficacy: Assessing a promising construct. *Journal of Educational Administration*, 42(5), 573–585.

Tschannen-Moran, M., & Gareis, C. R. (2005). Cultivating principals' sense of efficacy: Supports that matter. Paper presented at the Democracy in Educational Leadership: The Unfinished Journey Toward Justice, Nashville, TN.

Tschannen-Moran, M., & Gareis, C. R. (2007). Cultivating principals' self-efficacy: Supports that matter. *Journal of School Leadership*, 17(1), 89–114.

Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. Review of Educational Research, 68(2), 202–248.

UK Essays. (November 2018). Albert Bandura the founder of reciprocal determinism. Retrieved from https://www.ukessays.com/essays/psychology/albert-bandura-the-founder-of-reciprocal-determinism-psychology-essay.php?vref=1

United States. National Commission on Excellence in Education. (1983). A nation at risk: the imperative for educational reform. Washington, D.C.: The National Commission on Excellence in Education.

Wahlstrom, K. (2012). An up-close view of instructional leadership: A grounded analysis. In K. Leithwood & K. S. Louis (Eds.), Linking leadership to student learning (pp. 68–86). San Francisco: Jossey-Bass.

Waters, T., Marzano, R. J., & McNulty, B. (2003). Balanced leadership: What 30 years of research tells us about the effect of leadership on pupil achievement (A working paper).

Aurora, CO: Mid-continent Research for Education and Learning.

Watson, N. (2001) Promising practices: what does it really take to make a difference? Education Canada, 40(4), 4–6.

White, G. W., Stepney, C. T., Hatchimonji, D. R., Moceri, D. C., Linsky, A. V., Reyes-Portillo, J. A., & Elias, M. J. (2016). The increasing impact of socioeconomics and race on standardized academic test scores across elementary, middle, and high school. *American Journal of Orthopsychiatry, 86*(1), 10–23.

Xu, C. (2018). Principal's Impact on Student Achievement. Strong and Associates. Retrieved from https://moboces.org/UserFiles/Servers/Server_917767/File/Programs%20&%20Services/Professional%20Development/Tool%20Kit/TLE/1%20Stronge-Principal_Impact_on_Student_Achievement_9_26_18.pdf

Appendix A

Letter of Permission from Michael F. DiPaola to use DCI

Re: District Climate

Dipaola, Michael F <mfdipa@wm.edu>
Sun 2/2/2020 12:00 PM
To: Nicole Gilmore <nicole.gilmore@student.shu.edu>

Dear Nicloe _ You have my permission to use the District Climate Scale for your research study. Best wishes, MFD

Michael F. DiPaola, Chancellor Professor
Educational Policy, Planning, & Leadership
School of Education
College of William & Mary
PO Box 8795
Williamsburg, VA 23188
757-221-2344 (office)

From: Nicole Gilmore <nicole.gilmore@student.shu.edu>
Sent: Saturday, February 1, 2020 4:54 PM
To: Dipaola, Michael F
Subject: Re: District Climate

Good afternoon Dr. Dipaola,

I am kindly requesting a formal letter or email stating that I have your permission to use the DCI scale for my research on Principal Self-Efficacy and its relationship to School District Climate. I am in the process of submitting to IRB.

Thank you

Nicole Gilmore
Seton Hall University Doctoral Candidate

From: Dipaola, Michael F <mfdipa@wm.edu>
Sent: Wednesday, November 6, 2019 12:06 PM
To: Nicole Gilmore <nicole.gilmore@student.shu.edu>
Subject: District Climate

Hi Nicole - Professor Hoy forwarded your email inquiring about a measure at the district level...I've attached a copy of the DCI (District Climate Index), an explanation of its development and a table showing item factor loadings. Not sure if this will be helpful, but will give you an option to consider. Best wishes, MFD

Michael F. DiPaola, Chancellor Professor
Educational Policy, Planning, & Leadership

Appendix B

Letter of Permission from Megan Tschannen-Moran to use PSES

William & Mary
School of Education

MEGAN TSCHANNEN-MORAN, PHD
PROFESSOR OF EDUCATIONAL LEADERSHIP

February 2, 2020

Nicole,

You have my permission to use the Principals' Sense of Efficacy Scale, which I developed with Chris Gareis, in your research. The best citation to use is:

Tschannen-Moran, M. & Gareis, C. (2004). Principals' sense of efficacy: Assessing a promising construct. *Journal of Educational Administration*, 42, 573-585.

You can find a copy of these measures and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mxtsch . I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for these measures as well as other articles I have written on this and related topics.

All the best,

Megan Tschannen-Moran
William & Mary School of Education

P.O. Box 8795 • Williamsburg, VA 23187-8795 • (757) 221-2187 • mxtsch@wm.edu

Appendix C

Principal Self-Efficacy Scale

Principal Questionnaire

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for principals in their school activities.

Directions: Please indicate your opinion about each of the questions below by marking one of the nine responses in the columns on the right side. The scale of responses ranges from "None at all" (1) to "A Great Deal" (9), with "Some Degree" (5) representing the mid-point between these low and high extremes. You may choose any of the nine possible responses, since each represents a degree on the continuum. Your answers are confidential.

Please respond to each of the questions by considering the combination of your *current* ability, resources, and opportunity to do each of the following in your present position.

	"In your current role as principal, to what extent can you…"	None at All		Very Little		Some Degree		Quite a Bit		A Great Deal
1.	facilitate student learning in your school?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
2.	generate enthusiasm for a shared vision for the school?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
3.	handle the time demands of the job?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
4.	manage change in your school?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
5.	promote school spirit among a large majority of the student population?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
6.	create a positive learning environment in your school?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
7.	raise student achievement on standardized tests?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
8.	promote a positive image of your school with the media?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
9.	motivate teachers?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
10.	promote the prevailing values of the community in your school?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
11.	maintain control of your own daily schedule?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
12.	shape the operational policies and procedures that are necessary to manage your school?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
13.	handle effectively the discipline of students in your school?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
14.	promote acceptable behavior among students?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
15.	handle the paperwork required of the job?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
16.	promote ethical behavior among school personnel?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
17.	cope with the stress of the job?	①	②	③	④	⑤	⑥	⑦	⑧	⑨
18.	prioritize among competing demands of the job?	①	②	③	④	⑤	⑥	⑦	⑧	⑨

Appendix D

District Climate Index Scale

School District Climate

Please Check One Of the Following Under "Role" and "Level":

Role: Teacher __ Administrator __ Level**:** E.S. __ M.S. __ H.S.__

Directions: The following are statements about your school. Please indicate the extent to which each occurs, from Never (1) to Very Frequently (5).

		Never	Rarely	Sometimes	Often	Very Frequently
1.	The interactions between and among administrators are cooperative.	①	②	③	④	⑤
2.	Administrators respect the professional competence of their colleagues.	①	②	③	④	⑤
3.	The superintendent is responsive to the needs and concerns expressed by community members.	①	②	③	④	⑤
4.	The superintendent is friendly and approachable.	①	②	③	④	⑤
5.	The superintendent puts suggestions made by administrators into operation.	①	②	③	④	⑤
6.	Administrators help and support each other.	①	②	③	④	⑤
7.	Administrators are committed to helping students.	①	②	③	④	⑤
8.	The superintendent explores all sides of topics and admits that other opinions exist.	①	②	③	④	⑤
9.	The superintendent treats all Administrators as his or her equal.	①	②	③	④	⑤
10.	Administrators provide strong social support for colleagues.	①	②	③	④	⑤
11.	Principals create learning environments that are orderly and serious.	①	②	③	④	⑤
12.	The superintendent is willing to make changes.	①	②	③	④	⑤
13.	The superintendent lets administrators know what is expected of them.	①	②	③	④	⑤
14.	The superintendent maintains definite standards of performance.	①	②	③	④	⑤
15.	The superintendent is responsive to the needs and concerns expressed by administrators.	①	②	③	④	⑤
16.	Staff members are aware of our district mission and goals.	①	②	③	④	⑤
17.	I have confidence in the integrity of my colleagues.	①	②	③	④	⑤
18.	Data on district operations are reviewed regularly to determine progress in achieving goals.	①	②	③	④	⑤
19.	Results of our district monitoring process lead me to review my own practices.	①	②	③	④	⑤

Appendix E

IRB Approval Letter

SETON HALL UNIVERSITY
1 8 5 6

May 27, 2020

Nicole Gilmore

Re: Study ID# 2020-078

Dear Ms. Gilmore,

The Research Ethics Committee of the Seton Hall University Institutional Review Board reviewed and approved your research proposal entitled "The Relationship between District Climate and Principal Self-Efficacy" as resubmitted. This memo serves as official notice of the aforementioned study's approval as exempt. Enclosed for your records are the stamped original Consent Form and recruitment flyer. You can make copies of these forms for your use.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol, informed consent form or study team must be reviewed and approved by the IRB prior to their implementation.

You will receive a communication from the Institutional Review Board at least 1 month prior to your expiration date requesting that you submit an Annual Progress Report to keep the study active, or a Final Review of Human Subjects Research form to close the study. In all future correspondence with the Institutional Review Board, please reference the ID# listed above.

Thank you for your cooperation.

Sincerely,

Mara Podvey

Mara C. Podvey, PhD, OTR
Associate Professor
Co-Chair, Institutional Review Board

Office of the Institutional Review Board
Presidents Hall · 400 South Orange Avenue · South Orange, New Jersey 07079 · Tel: 973.275.4654 · Fax 973.275.2978 ·
www.shu.edu

Appendix F

Participant Consent Letter

Seton Hall University
Institutional Review Board
JUN 01 2020
Approval Date

SETON HALL UNIVERSITY
1 8 5 6

Expiration Date
JUN 01 2021

Consent to Participate in a Research Study

Kindly accept this letter of consent to participate in a research study on the relationship between district climate and principal self-efficacy of public-school principals in Essex County, NJ. The study is being conducted by Nicole Gilmore, a doctoral candidate in the Executive Leadership Ed.D. program at Seton Hall University.

Protocol Title: The Relationship between District Climate and Principal Self-Efficacy

Please read this consent document carefully before participating in this study.

Purpose of the research study: This study is an exploratory analysis of the possible relationship between district climate and principal self-efficacy. The study seeks to advance thinking about the role of the school district in supporting principals to meet the demands of school leadership, or what practices districts should steer away from that may hinder principals' efforts to lead given the increased complexities of the principalship.

Benefits to participants: While there is no direct benefit to participants, the data gathered from the study may serve to inform school districts, principal preparation programs and principals in understanding the relationship between district climate and principal's perception of their capability to make a difference in the schools they lead and to effectively manage the challenges they face.

What you will be asked to do in the study: Participants will be asked to complete a 54-item survey – a combined Demographic/Principal Self-Efficacy/District Climate Index survey, that asks participants to provide information regarding how they perceive the school district in which they work, as well as their attitudes and beliefs of their ability to carry out their responsibilities as a principal. Items one through six, capture the participant's school characteristics, participation in a principal preparation program and years of service. Items 7 through 24, capture the participant's perceived capability to lead as it relates to their managerial, instructional and moral leadership given the challenges they face within their school district. Items 25 through 54, capture the participant's feelings about how their district climate supports or hinders their ability to lead given the context in which they work. The survey will be completed through www.surveymonkey.com and all responses are anonymous. The estimated time to complete the survey is 20 – 30 minutes. The survey window will be open for four weeks. Participants are asked to complete the survey in one sitting as there is no way to save responses and return to them later using an anonymous survey design.

Anonymity of Participants: The survey is anonymous. Participants are asked not to include any identifying information in the survey such as their name, school or district. This is a web-based questionnaire, in which absolute anonymity cannot be guaranteed, however IP addresses will not be collected by the researcher. Please note that the survey is being conducted using SurveyMonkey. It is not affiliated with Seton Hall University or the researcher. SurveyMonkey

Department of Education Leadership, Management & Policy
400 South Orange Avenue • South Orange, New Jersey • 07079 • www.shu.edu